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# AN ASSESSMENT OF THE CBO COST ESTIMATE OF S. 1895: THE UNINTENDED ECONOMIC CONSEQUENCES OF THE PROPOSED HEALTH CARE PRICE CONTROL SYSTEM

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# An Assessment of the CBO Cost Estimate of S. 1895: The Unintended Economic Consequences of the Proposed Health care Price Control System

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## Executive Summary

Surprise medical bills have increasingly become a topic of heated national debate. In fact, according to a 2018 survey from NORC at the University of Chicago, about 57% of American adults have received one. As such, these surprise bills have become central to bipartisan federal policymaking. Although all proposed federal legislation agrees to end, and especially protect patients from, out-of-network surprise medical bills, these proposals have significantly different approaches to address this issue. Several proposed bills use a reasonable market-based rate to apply to those outlier charges by out-of-network health care service providers. For example, the Protecting People from Surprise Medical Bills Act (H.R. 3502), which is similar to the New York State law, requires a mediator to use the 80th percentile of charges for provider-payer dispute resolutions.

Opponents of market-based rates propose a system where the government sets payment rates for all health care service providers, like the system used in California. The Lower Health Care Costs Act (S. 1895, Section I) proposes to use the median in-network rate as the benchmark for out-of-network health care service providers. In July 2019, the Congressional Budget Office (CBO) released its cost estimate for Section I of S. 1895. The CBO estimated that Section I of S. 1895 would reduce federal deficits by $8.3 billion during 2019-2024 and $24.9 billion during 2019-2029.

### What You Should Know

There is strong public support for ending surprise medical bills. However, S. 1895 goes beyond that and sets rates for all physicians.

The CBO cost-savings estimate is based on unrealistic assumptions and fails to account for the negative impact on the number of physicians nationwide.

The unintended consequences are significant. The number of available physicians will drop. Patient quality will be reduced. Healthcare expenses will rise.

A resolution model that uses market-based prices, like the New York State system, is a more effective way to address surprise medical bills.

**Issues with the CBO Cost Estimates:** There are at least two major issues with the CBO cost estimates of the Lower Health Care Costs Act (S. 1895):

- The proposed legislation, and therefore the CBO cost estimate, goes beyond the core issue of surprise medical bills to propose a price control system for health care in the U.S.
- The CBO cost estimate relies on a set of unrealistic assumptions, including that the change in costs would result in reduced health insurance premiums across the board and that the supply of physicians would not be affected by significant payment cuts. As a result, the CBO cost estimate does not accurately assess the legislation to end surprise medical bills. Furthermore, it does not

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consider the short- and long-term unintended economic consequences of a price control system on U.S. health care costs.

**Unintended Consequences:** The Lower Health Care Cost Act, which uses the median in-network rates to set payment rates for all health care service providers, will have short- and long-term adverse effects for the U.S. health care system.

*Short-Term Direct Impact.* In the short-term, the proposed price control system will reduce payment rates for both in- and out-of-network health care service providers by between 15% and 20% (according to CBO).

- With lower payment rates, self-employed physicians will be very likely to leave their practices to become employed physicians in hospitals.
- Lower payment rates will also force employed physicians to see more patients and cut down their non-patient time which is typically devoted to research and training.
- The federal and state governments will lose both corporate and individual income tax revenue from physicians who leave their practice and from reduced physician wages.

*Longer-Term Direct Impact.* In the longer-term, the proposed price control system will create adverse effects on the U.S. health care system.

- Physician shortages will be more severe than the current forecast. While the demand for health care services remains unaffected by the proposed legislation, the supply of health care service providers declines as a result of lower payment rates.
- The quality of health care services will deteriorate as physicians add more patients into schedules and forgo time for critically important professional development.
- Access to care will suffer because the number of general physicians and physician specialists willing to cover emergency services will significantly fall.
- Health care costs will rise due to consolidation from self-employed physicians moving to hospitals. As seen in the past decade, services performed by employed physicians have higher prices than those by self-employed physicians.

*Indirect and Induced Effects.* In addition to direct negative economic impacts on physicians and patients, the price control system will create indirect and induced negative economic impacts on the U.S. economy. These detrimental impacts include job losses for supporting workers and lost tax revenue.

**Lessons from State Policies:** There is much to be learned from individual states who have set their own policies to address surprise medical bills. New York successfully curbs surprise medical bills by requiring the mediator to use the 80$^{th}$ percentile of charges to eliminate outlier charges by out-of-network health care service providers. An assessment of five years since the law's enactment shows New York's system has many positive outcomes for patients, physicians, and insurers. In contrast, the California price control system has created additional physician shortages.

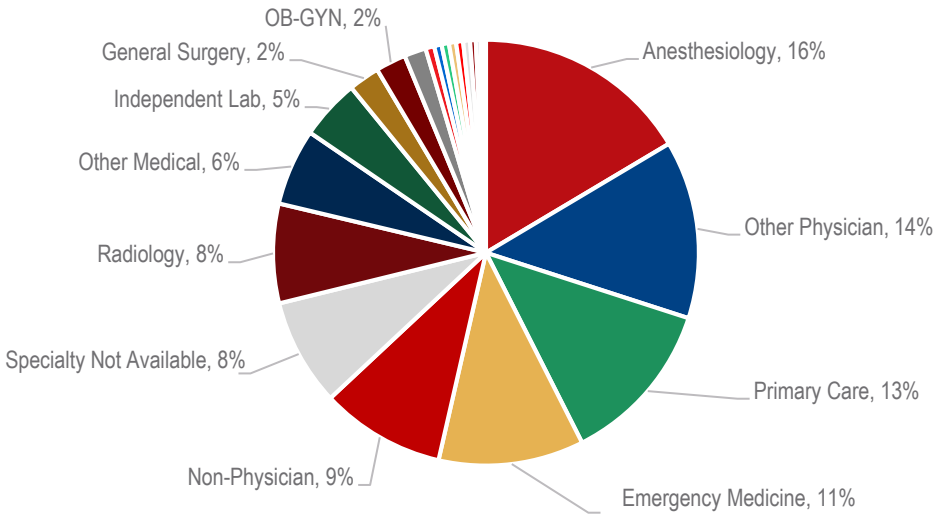
**Public Support:** Public support for ending surprise medical bills is strong and so is opposition to the price-control system. According to a recent national poll conducted from May 31 to June 1, 2019, 69% of Americans prefer an independent third-party resolution over allowing the government to set rates. Furthermore, 81% of Americans believe insurance companies should pay for surprise medical bills.

## I. Background and Approaches to Address Surprise Medical Bills

Surprise medical bills are those that a patient receives unexpectedly from either out-of-network emergency or unscheduled services. Situations in which patients receive medical bills occur when they cannot select emergency rooms, surgeons, surgical assistants, anesthesiologists, pathologists, or ambulance providers. According to a 2018 survey from NORC at the University of Chicago, about 57% of American adults have received one.[2]

National statistics of the prevalence and dollar amount of surprise medical bills are limited. Quantitative analyses are mostly based on a sample of claims and surveys. According to Health Care Cost Institute's database of 620,000 in-network inpatient admissions, 14.5% of admissions in 2016 had at least one associated out-of-network professional claim, ranging widely from 1.7% in Minnesota to 26.3% in Florida. Four specialties – anesthesiology (16.5%), other physicians (13.5%), primary care (12.6%), and emergency medicine (11.0%) – made up nearly 54% of all out-of-network claims in 2016.[3] (Figure 1)

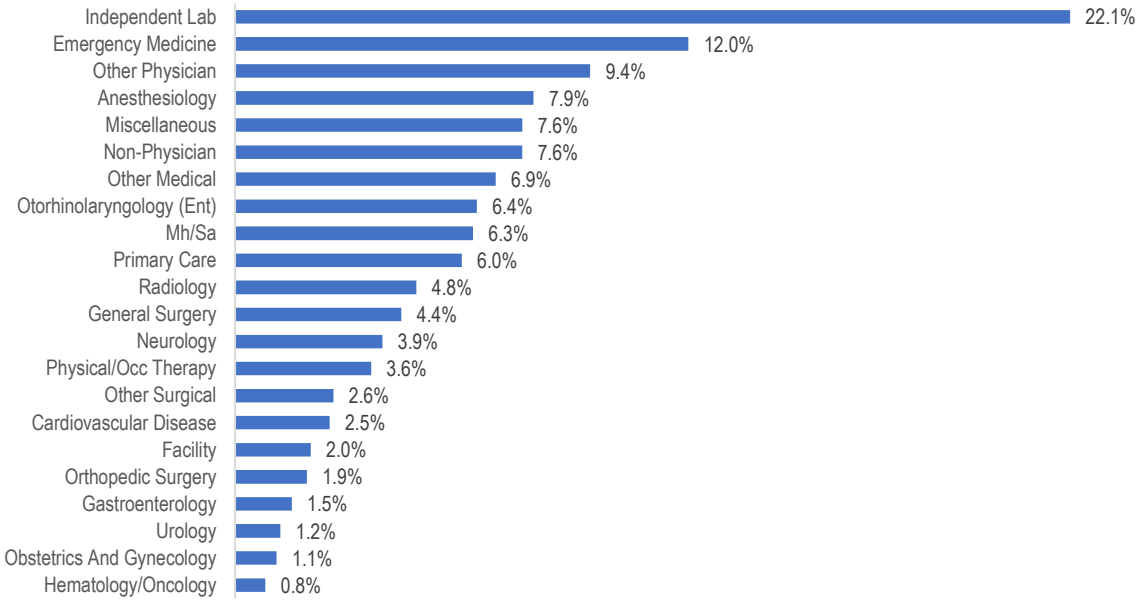
**Figure 1.**
Anesthesiology, other physicians, primary care, & emergency medicine accounted for 54% of out-of-network claims




The three specialties that most often billed out-of-network at in-network facilities were independent labs (22.1%), emergency medicine (12.0%), and other physicians (9.4%) while the three specialties that least often billed out-of-network were oncology (0.8%), OB-GYN (1.1%), and urology (1.2%).[4] (Figure 2)

[2] NORC. 2018. "New Survey Reveals 57% of Americans Have Been Surprised by a Medical Bill." University of Chicago.
[3] Kennedy, Kevin, Bill Johnson, and Jean Fuglesten Biniek. 2019. "Surprise out-of-network medical bills during in-network hospital admissions varied by state and medical specialty, 2016." Health Care Cost Institute.
[4] Ibid.

**Figure 2.**
Over 22% of independent lab in-network facilities were billed by out-of-network rates




Doctors in all types of practice charge more than Medicare and are paid more than Medicare by private insurers. Indeed, inflation-adjusted Medicare fees for physician services have dramatically fallen over time.[5] A 2016 study analyzed the Centers for Medicare & Medicaid Services' (CMS) physician utilization and payment data of 429,273 individual physicians across 54 medical specialties. The charge-to-Medicare payment ratio (individual charges divided by total Medicare allowable amount for medical services) showed a median of 2.5 (interquartile range, 1.8-3.6). In other words, half of physicians charged 2.5 times Medicare allowable amounts while 25% physicians charged 3.6 times and 25% charged 1.8 times. The ratio varied across specialties as well as states. Anesthesiology had the highest median (5.8 and interquartile range, 4.5-7.9) and general practice had the lowest median (1.6 and interquartile range 1.3-2.2).[6] (Table 1)

**Table 1.**
The median of charge-to-Medicare-payment ratio is 2.5

| Lowest quarter Median Payment Ratio between 1.6 and 1.8 | Second quarter Median Payment Ratio between 1.9 and 2.5 | Third quarter Median Payment Ratio between 2.6 and 3.6 | Top quarter Median Payment Ratio between 3.8 and 5.8 |
|---|---|---|---|
| • Family practice<br>• Dermatology | • Cardiology<br>• Hematology | • Nuclear medicine<br>• Radiation oncology | • Anesthesiology |

[5] American Medical Association. 2019. "Statement for the Record to the U.S. House or Representatives Committee on Energy and Commerce Subcommittee on Health Re: No More Surprises: Protecting Patients from Surprise Medical Bills." June 12.
[6] Bai, Ge and Gerard F. Anderson. 2017. "Variation in the Ratio of Physician Charges to Medicare Payments by Specialty and Region." Research Letter, JAMA.

| | | | |
|---|---|---|---|
| • Allergy<br>• Psychiatry<br>• General practice | • Otolaryngology<br>• Maxillofacial surgery<br>• Neurology<br>• Physical medicine<br>• OB-GYN<br>• Pediatric medicine<br>• Pulmonary disease<br>• Ophthalmology<br>• Nephrology<br>• Infectious disease<br>• Rheumatology<br>• Other specialties<br>• Endocrinology<br>• Internal medicine<br>• Geriatric medicine | • Pain management<br>• Surgical oncology<br>• Thoracic surgery<br>• Vascular surgery<br>• Interventional pain management<br>• Hand surgery<br>• Cardiac surgery<br>• Gastroenterology<br>• Plastic and reconstructive surgery<br>• Sports medicine<br>• Gynecological/ oncology<br>• General surgery<br>• Cardiac electrophysiology<br>• Urology<br>• Critical care<br>• Medical oncology | • Interventional radiology<br>• Emergency medicine<br>• Pathology<br>• Diagnostic radiology |

Many states have already implemented laws to protect patients from surprise medical bills. At the federal level, Congress is proposing legislation to end surprise out-of-network medical bills. Although the proposed bills have a similar objective to protect patients from surprise medical bills, their approaches are quite different. For example, the Lower Health Care Costs Act (S.1895) requires insurers to reimburse out-of-network health care providers at the median in-network rate for a given type of service and geographic area; the proposed price control system in S.1895 is similar to the current California state law. In contrast, H.R.3502, Protecting People from Surprise Medical Bills Act, allows for a neutral mediation and directs the mediator to consider the 80$^{th}$ percentile of regional charges for provider-payer dispute resolutions; this Act is similar to the current New York state law. Other proposed bills, such as the Outrageous Practice of Surprise Medical Bills Act (S.1531) and the Reauthorizing and Extending America's Community Health Act (H.R. 2328), include mediation, but only allow mediators to consider the in-network rates which results in similar price control issues as S.1895.

## II. CBO Cost Estimate and its Underlying Unrealistic Assumptions of the Lower Health Care Costs Act

In July 2019, the CBO released its estimated budgetary effects of S. 1895. The proposed section to end surprise medical bills (Title I – Ending Surprise Medical Bills) is only one of the five sections in the proposed legislation. Since the CBO provides a separated cost estimate for Title I, this brief only focuses on the CBO cost estimate of Title I in the legislation.

The CBO estimated that Title I would reduce the federal budgetary deficit by over $8.3 billion during 2019-24 and nearly $24.9 billion during 2019-29. The CBO estimated that enacting Title I of S. 1895 would increase revenues by $23.8 billion and reduce direct spending by $1.1 billion during the period 2019-29. [7] (Table 2)

**Table 2.**
CBO estimated Title I, S. 1895 will reduce budgetary deficits by nearly $24.9 billion during 2019-29

| | 2019-2024 | 2019-2029 |
|---|---|---|
| Estimated Change in Outlays | -$410 million | -$1,107 million |
| Estimated Change in Revenues | $7,912 million | $23,774 million |
| Estimated Change in the Deficit | -$8,322 million | -$24,881 million |

The CBO cost estimates are based on the requirements of the proposed legislation and a set of CBO assumptions of the economic consequences of the proposed legislation. First, the CBO constructed its cost estimate based on the requirements of the bill. Since the legislation proposes to use the government price control policy to set payment rates for insurers to pay health care service providers, the CBO cost estimate reflects a scenario where the price control system is applied to the broader health care system rather than solely to end surprise medical bills. Second, the CBO made a set of economic assumptions to assess the price control system as proposed in the legislation. Since the assumptions are unrealistic (e.g., insurers will reduce premiums and the supply of physicians will not be affected by the price control system), the CBO cost estimate also reflects an unrealistic scenario.

Requirements in Ending Surprise Medical Bills, Lower Health Care Costs Act (Title I)

The legislation explicitly proposes to use a government price control policy to set payment rates for both out-of-network and in-network health care services. The proposed legislation goes beyond the objective of protecting patients from surprise medical bills. As seen in the CBO cost estimate, the three main requirements in Section I - Ending Surprise Medical Bills in the Lower Health Care Costs Act are:[8]

1. To prohibit health care providers from sending surprise medical bills to patients;
2. To require insurers to treat out-of-network care as in-network care for the purpose of calculating co-payments, co-insurance, deductibles, and spending toward out-of-pocket limits; and
3. To require insurers to reimburse out-of-network providers at the median in-network rate for a given provider type and geographic area as payment in full.

While the first requirement of S. 1895 addresses surprise medical bills, the additional two requirements go beyond the issue of surprise medical bills to create a price control system in the United States. The second requirement will abolish the out-of-network payment rates and the third requirement will set one payment rate for both in-network and out-of-network health care service providers. Essentially, the legislation proposes to outlaw physician charges and to use comprehensive government price controls for the entire U.S. health care

[7] Congressional Budget Office, Cost Estimate, S. 1895, Lower Health Care Costs Act, July 16, 2019.
[8] Congressional Budget Office, Cost Estimate, S. 1895, Lower Health Care Costs Act, July 16, 2019.

system. States, such as New York, have not needed to implement a price control system to curb surprise medical bills and to protect patients from the negotiations and disputes between insurers and physicians.

Most of the cost-savings estimated by the CBO is a result of the price controls set in the second and third requirements, not the first requirement of addressing surprise medical bills. As seen in its calculation, the CBO anticipates that payments to in-network health care providers will converge to the median rates as a result of the price control. Based on the proposed price control system in S. 1895, the CBO calculated the federal budgetary deficit reduction anticipating that all out-of-network and in-network health care service providers will be required to charge at the current median rate.[9]

Under the proposed price control system, the CBO estimates that payment rates to health care service providers will be reduced between 15% and 20% below the current national average and the budgetary deficit will be reduced by $24.9 billion during 2019-2029. The CBO stated clearly that only a small portion of the $24.9 billion federal budgetary deficit reduction comes from ending surprise medical bills. In fact, 80% of the CBO cost saving estimate came from changes in in-network payment rates. The CBO also emphasizes that the cost of surprise bills is only a small portion of all health care spending. The CBO added that the proposed price control system would have a significant impact on the negotiations between insurers and health care service providers in the U.S. health care system. In recent testimony for the U.S. House Committee on Ways and Means Subcommittee on Health, Tom Nickels, executive vice president of the American Hospital Association (AHA) stated, "Any public policy solution should ensure providers are able to continue to negotiate appropriate payment rates with health plans." He continued, "Providers and health plans should be able to develop networks that meet consumers' needs, and not be compelled to enter into contracts that could thwart the development of more affordable coverage options that support coordinated care."[10]

While the public widely supports ending surprise medical bills, it also opposes a price control system. A national public opinion poll conducted between May 31 and June 1, 2019 found that 69% of Americans prefer an independent third-party resolution over allowing the government to set rates. Furthermore, 81% of Americans believe insurance companies should pay for surprise medical bills.[11]

Underlying Assumptions of CBO Cost Estimate

The CBO cost estimate relies on two major unrealistic assumptions: (1) insurance companies will reduce premiums while incurring higher administrative costs and (2) the price control system will not affect the supply of physicians, quality of care, and health care costs in the short- and long-term.

*Reduction in Insurance Premiums.* The assumption that insurers will reduce premiums is unrealistic when the CBO also expects insurers will have higher administrative costs. Although anticipating administrative costs to rise about 20% of the estimated reduction in premium, the CBO still assumes insurers will reduce

[9] The CBO has a full section to explain the conversion of in-network and out-of-network rates to the median rates as a result of the price control.
[10] "Reducing Payments for In-Network Care", Congressional Budget Office, Cost Estimate, S. 1895, Lower Health Care Costs Act, July 16, 2019.
[11] The poll was conducted by Morning Consult between May 31-June 1, 2019 for American College of Emergency Physicians. https://www.acep.org/federal-advocacy/morning-consult-poll/

premiums because the reduction in out-of-network and in-network rates are higher than the administrative costs. Health insurance premiums and the net cost of health insurance, which is the difference between health premiums earned and benefits incurred,[12] have been rising faster than health consumption expenditures and inflation in the U.S. in the past decades. Net cost of health insurance per enrollee tripled since 2000, rising at over 40% faster than health consumption expenditures and twice than that of inflation (measured by the consumer price index). On average, net cost of health insurance per enrollee rose 6.7% per year compared to 4.7% in health consumption expenditures and 2.1% in consumer price index. The share of net cost of health insurance rose from 5.0% ($228/$4,560) per enrollee in 2000 to 6.9% ($683/$9,920) per enrollee in 2017.[13] (Table 3) Therefore, it is clear that a slight reduction in health care cost expenditures cannot reliably be expected to translate into a slight reduction in health insurance premiums.

**Table 3.**
Net cost of health insurance per enrollee tripled over the period between 2000-2017

| | 2000 | 2017 | Annual Growth 2000-2017 |
|---|---|---|---|
| Health Consumption Expenditures | $4,560 | $9,920 | 4.7% |
| Personal Health care | $4,119 | $8,833 | 4.6% |
| Net Cost of Health Insurance | $228 | $683 | 6.7% |
| as % of health consumption expenditures | 5.0% | 6.9% | -- |
| Consumer Price Index (CPI; annual rate) | 3.7% | 1.7% | 2.1% |

*Supply of Physicians and Quality of Care.* The assumption that the supply of physicians and the quality of care will not be affected by a large reduction in payment rates is also unrealistic. While rates will be cut by between 15% and 20%, the CBO assumes that the supply of physicians will not be affected. Decreased rates result in lower payment for physicians.[14] Empirical research in health economics finds a strong relationship between wages and the supply and quality of physicians. On average, a 2% increase in payment rates leads to a 3% increase in care provisions, including physician supply.[15] In addition, reimbursement rates are shown to be positively correlated with physician productivity; when reimbursement rates rise, non-patient hours rise and patient hours decline. Studies have also found that a substantial reduction in reimbursements led to a substitution of physicians' time spent on professional development for revenue-generating patient care.[16] Further studies have found a positive relationship between compensation and human and physical capital

[12] The Centers for Medicare & Medicaid Services calculates net cost of insurance as the difference between premiums earned and benefits incurred; it includes insurers' costs of paying bills, advertising, sales commissions, and other administrative costs, net additions/subtractions from reserves, rate credits and dividends, premium taxes, and profits and losses.
[13] Centers for Medicare & Medicaid Services, Table 2, National Health Expenditures.
[14] Clemens, Jeffrey and Joshua D. Gottlieb. 2014. "Do Physicians' Financial Incentives Affect Medical Treatment and Patient Health?" American Economic Review.
[15] Clemens, Jeffery and Joshua D. Gottlieb. 2014. "Do Physicians' Financial Incentives Affect Medical Treatment and Patient Health?" American Economic Review.
[16] Ibid.

investments for both hospitals and physicians.[17] We will discuss in detail in the section below the effects of wage reduction on labor supply of physicians and health care costs in the short- and long-term.

## III. Unintended Economic Consequences of the Proposed Price Control System

The CBO cost estimate does not consider unintended economic consequences of the proposed price control system. The CBO cost estimate of the proposed price control system would reduce health consumption expenditures by between 3.1% and 4.2% at the most in the very short-term, and only for the private self-funded marketplace. However, the proposed price control system would create a series of adverse effects on the supply of physicians, the quality of health care, and health care costs. Physician shortages in the U.S. would widen further and health care costs would rise in the medium- and longer-term due to physicians moving from independent practices to hospitals, which increases health care costs. Fewer physicians would also negatively affect the U.S. economy.

*Minimal Impact on Health Expenditures.* Total health consumption expenditures amounted to over $3.2 trillion in 2017, rising an average 5.5% a year from nearly $1.3 trillion in 2000. Physician and clinical services accounted for $666.5 billion and 20.8% of total health consumption expenditures. During 2000-2017, physician and clinical services grew by an average of 5.1% per year compared to an average of 5.5% per year for total health consumption expenditures and 7.5% for the net cost of health insurance.[18] (Table 4)

**Table 4.**
Physician and clinical services grew slower than health consumption expenditures and net cost of health insurance

| | 2000 ($ billion) | 2017 ($ billion) | Annual Growth 2000-2017 |
|---|---|---|---|
| Health Consumption Expenditures | $1,285.9 | $3,202.9 | 5.5% |
| Personal Health care | $1,161.5 | $2,851.9 | 5.4% |
| Hospital | $415.5 | $1,092.8 | 5.9% |
| Physician and Clinical Services | $288.2 | $666.5 | 5.1% |
| Net Cost of Health Insurance | $64.2 | $220.7 | 7.5% |

The CBO estimated that the proposed price control system would reduce physician payment rates by 15% to 20%. Physicians and clinical services only account for 20.8% of total health consumption expenditures. Even with a drastic cut in physician payment rates, the amount of reduced spending on physicians would have minimal impact reducing total health consumption expenditures.

*Consolidation and Higher Health care Prices.* The 15% to 20% reduction in payment rates would affect self-employed physicians more than employed physicians. In the short-term, self-employed physicians would

[17] Ibid.
[18] Centers for Medicare & Medicaid Services, Table 2, National Health Expenditures.

likely leave their own practices for hospitals. As seen in the past decade, U.S. hospitals have acquired many physician practices. Studies found prices of the services provided by acquired physicians increased by an average of around 14%, varying substantially across specialties and as high as 27% more for Medicare and 21% higher costs for patients for certain cardiology, orthopedic, and gastroenterology services.[19]

*Negative Impact on Physician Supply.* The proposed price control system will have an adverse effect on the supply of physicians and the quality of health care in the medium- and long-term. Approximately 800,300 physicians are currently practicing in the U.S., including 226,000 primary care physicians and over 574,300 surgeons and other medical specialists.[20] The American Medical Association (AMA) estimated 45.9% of physicians are self-employed, ranging from 42.6% in family practice to 66.3% in surgical subspecialties.[21] Studies found that self-employed and employed physicians respond to wage changes differently. For example, Robert McClellan and Shannon Mok at the CBO conducted a review of economic research on the effects of changes in after-tax wages on labor supply of different income and professional groups in the U.S. economy. Among the many academic research articles they evaluated, one research focused on the supply of physicians. They found statistically significant positive wage elasticities for self-employed physicians (0.33) but a small and statistically insignificant wage elasticity for employed physicians and statistical insignificant positive wage elasticities for male, self-employed, solo-practice physicians.[22] A 0.33 wage elasticity means the supply of physicians would increase (decrease) by 0.33% for every 1% increase (decrease) in physician wages. We applied the estimated 0.33 wage elasticity of self-employed physicians to estimate the reduction in self-employed physician supply by specialty. For a 15% - 20% reduction in rates, we calculate the self-employed physician supply would be reduced by 2.1% to 2.8% in family practice and 3.3% to 4.4% in surgical subspecialties. (Table 5)

**Table 5.**
The 15% to 20% rate reduction would reduce self-employed physicians by between 2.1% and 4.4%

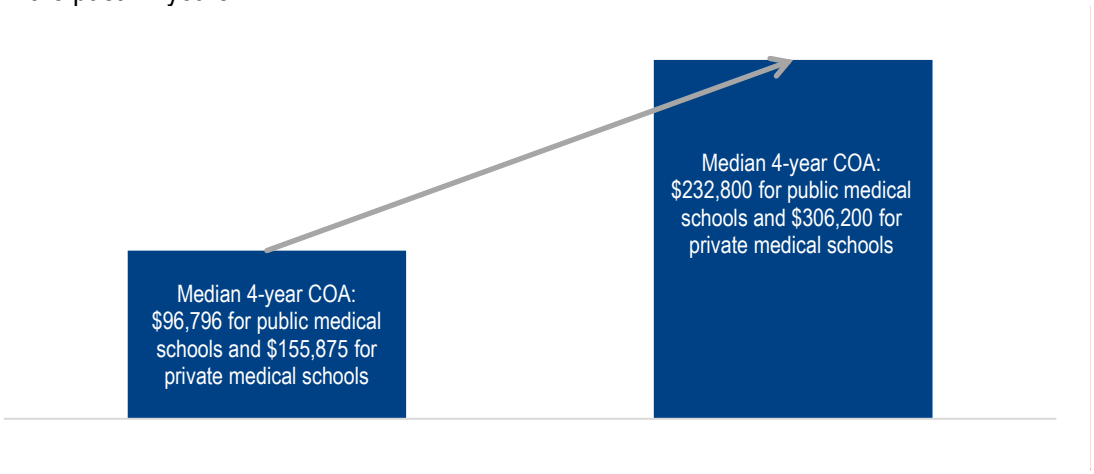
| | Owners and Independent Contractors | Reduction in Self-employed Physician Supply |
|---|---|---|
| Surgical subspecialties | 66.3% | 3.3% - 4.4% |
| Radiology | 59.4% | 2.9% - 3.9% |
| OB-GYN | 58.1% | 2.9% - 3.8% |
| Internal medicine subspecialties | 56.7% | 2.8% - 3.7% |
| Anesthesiology | 54.5% | 2.7% - 3.6% |
| Emergency medicine | 53.5% | 2.6% - 3.5% |

[19] Capps, Cory, David Cranove, and Christopher Ody. 2018. "The effect of hospital acquisitions of physician practices on prices and spending." Journal of Health Economics; Avalere Health. 2017. "Implications of Hospital Employment of Physicians on Medicare & Beneficiaries." Physicians Advocacy Institute.
[20] Association of American Medical Colleges. 2019. "2019 Update The Complexities of Physician Supply and Demand: Projections from 2017 to 2031." AAMC.
[21] Kane, Carol K. 2019. "Updated Data on Physician Practice Arrangements: For the First Time, Fewer Physicians are Owners than Employees." Policy Research Perspectives, American Medical Association.
[22] McClellan, Robert and Shannon Mok. 2012. "A Review of Recent Research on Labor Supply Elasticities." Working Paper Series, Congressional Budget Office; Showalter, Mark H. and Norman K. Thurston. 1997. "Taxes and labor supply of high-income physicians." Journal of Public Economics.

| | | |
|---|---|---|
| General internal medicine | 53.2% | 2.6% - 3.5% |
| Psychiatry | 51.2% | 2.5% - 3.4% |
| General surgery | 48.5% | 2.4% - 3.2% |
| Other | 47.9% | 2.4% - 3.2% |
| Pediatrics | 44.4% | 2.2% - 2.9% |
| Family practice | 42.6% | 2.1% - 2.8% |

In the longer-term, wage reduction will affect the total supply of physicians negatively. Educational costs to become a physician are expensive and continue to grow. It takes between 12 and 15 years to become a trained physician. After graduating from college, students spend another 4 years in medical school plus 4 to 7 years of residency to become physicians. The median four-year cost of attendance (COA) grew by over 96% from $155,875 in 1999 to $306,200 in 2016 among private medical schools and by over 140% from $96,796 in 1999 to $232,800 in 2016 among public medical schools. Nearly 74% of new medical school graduates in 2016 had education debt; the median education debt among medical school graduates was $190,000.[23] (Figure 3)

**Figure 3.**
4-year cost of attendance grew by over 140% for public medical schools and over 96% for private medical schools in the past 17 years




With lower payment rates (i.e., lower earnings), fewer students will be able to afford to go to medical school. In California, a state with price controls for health care, a growing physician shortage has become an acute issue. In 2019, in order to retain young physicians, California established the Proposition 56 Medi-Cal

[23] Association of American Medical Colleges. 2017. "An Updated Look at Attendance Cost and Medical Student Debt at U.S. Medical Schools." AAMC Analysis in Brief'; Association of American Medical Colleges. 2012. "Trends in Cost and Debt at U.S. Medical Schools Using a New Measure of Medical School Cost of Attendance." AAMC Analysis in Brief.

Physicians and Dentists Loan Repayment Act Program and appropriates $340 million for CalHealthCares, a loan assistance program for recently graduated physicians and dentists.[24] [25]

With the growing physician shortage across the country, lower payment rates would magnify the problem. As the population is growing and aging, the demand for health care continues to rise at a rapid pace. Meanwhile, the supply of physicians continues to grow slower than the rising demand. Although the number of students enrolled in medical schools grew nearly 30% over the past 15 years, more than 33% of existing physicians will retire in the next 10 years. It generally takes between 12 and 15 years of education and training after high school and half of a million dollars to become a licensed physician. In its recent report, the Association of American Medical Colleges projects the physician shortfall to be between 46,900 and 121,900 physicians by 2032. The projections include a primary care physician shortage of 21,000 to 55,200 physicians and a non-primary care specialty shortage of 24,800 to 65,800 physicians, including a 14,300 to 23,400 shortfall of surgical specialties.[26] These shortages will result in reduced quality of care; physicians will need to see more patients each day and will forgo critically important professional development. Additionally, hospitals and clinics may not be able to fill gaps in coverage, especially for specialists and those who cover emergency rooms, which negatively affects access to care.

*Forgone Income Tax Revenue.* A direct effect of reduced supply and wages of physicians on the federal budget is forgone revenue from both individual and corporate income tax. Physicians pay a significant amount of federal income tax. A price control policy would result in forgone income tax revenue for the federal government. For example, according to the Bureau of Labor Statistics (BLS), the average physician salary was $210,980 in 2018, which is subject to 24% federal income tax rate for joint filers and 35% for single filers.[27] Using the joint filer tax rate, a physician earning the average salary has a federal income tax obligation of 24% of the amount over $165,000. If wages decreased by 15% due to the price control policy, the average wage would be reduced by $31,647 ($210,980 x 15%) per year. The federal government would forgo $7,592 ($31,647 x 24%) tax revenue per year per physician.[28] For every 80,000 physicians (10% of the current 800,000 physicians in the country) who would be affected by the price control policy, the federal government would forgo nearly $608 million income tax revenue a year. Additionally, independent physicians who leave the practice and close down their business no longer pay federal corporate income tax. The average federal corporate income tax rate is 21%.[29] Both federal and state governments would lose out on income tax from physicians who leave the practice.

*Indirect and Induced Effects.* The reduction of physicians also has indirect and induced effects on the U.S. economy. The AMA estimates each physician supports 17 total direct, indirect, and induced jobs that

[24] CalHealthCares incentivizes physicians to provide care to Medi-Cal beneficiaries by repayment educational debt up to $300,000 in exchange for a five-year service obligation. All awardees are required to maintain a patient caseload of 30% or more Medi-Cal beneficiaries.
[25] California Proposition 56, California Department of Health Care Services (DHCS); About the CalHealthCares Program, Physicians for a Healthy California.
[26] Association of American Medical Colleges. 2019. "2019 Update The Complexities of Physician Supply and Demand: Projections from 2017 to 2031." AAMC.
[27] Bureau of Labor Statistics. Occupational Employment Statistics, May 2018; Tax Foundation. 2019 Tax Brackets.
[28] There is no change tax bracket. The federal income tax rate for a $179,341 income for joint filers is 24%.
[29] Pomerleau, Kyle. 2019. "The United States' Corporate Income Tax Rate is Now More in Line with Those Levied by Other Major Nations." The Tax Foundation. February 12.

generate over $1.4 million in wages, produce nearly $3.2 million in output, and pay $126,129 in state and local taxes.[30] (Table 6)

**Table 6.**
Each physician supports 17 direct, indirect, and induced jobs in the economy

| | Total Economic Impact | Economic Impact per Physician |
|---|---|---|
| Jobs | 12,575,602 | 17 |
| Wages and Benefits | $1.0 trillion | $1,417,958 |
| Output | $2.3 trillion | $3,166,901 |
| State and local Taxes | $92.9 billion | $126,129 |

Physicians play an important role in the U.S. economy. Because each physician supports 17 jobs, both in and outside of the health care industry, policies that lower physician revenues and push physicians out of business will lead to both losses of jobs and the loss of tax revenues from the salaries of those employed.

## IV. Market-based Benchmark for Out-of-network Payments

States have different approaches to curb surprise medical bills and keep patients out of billing disputes and negotiations between insurers and health care service providers. Some use market-based benchmarks while others use negotiated-based benchmarks. For example, New York uses the 80th percentile charge from an independent database unaffiliated with any insurer to define a "Usual and Customary Cost (UCC)." Connecticut mandates payment by the insurer at the highest of three specified standards. Many states allow for mediation and both New York and Texas specifically direct the mediator to consider the 80th percentile of regional chargers. In contrast, California uses the median in-network negotiated rate as a price cap.[31]

Evidence from New York suggests that the independent dispute resolution (IDR) system that relies on market-based rates would work for all parties – insurers, physicians, and patients. A study found the New York State law reduced the frequency of out-of-network billing by 6.8% relative to changes in other New England states. In addition, New York's state law lowered in-network payments to physicians by 8.8%.[32] Similarly, a five-year assessment of the implementation and operation of New York's Surprise Bill law concluded that the law went smoothly and was relatively fair to all parties – insurers, physicians, and patients. The study concluded that the law is working as intended to protect consumers from surprise medical bills. The study shows that consumer complaints about surprise medical bills dropped significantly. Physicians are largely satisfied with

[30] IQVIA. 2018. "The National Economic Impact of Physicians – National Report." The American Medical Association. Note that this study used 2015 data and therefore the number of physicians is lower than the number of physicians reported by the Association of American Medical Colleges in 2019.
[31] FAIR Health. Comments on Surprise Billing Discussion Draft: The No Surprises Act to Chairman Frank Pallone and Ranking Member Greg Walden, House Energy and Commerce Committee, U.S. House of Representative, May 28, 2019.
[32] Cooper, Zack, Fiona Scott Morton, and Nathan Shekita. 2018. "Surprise! Out-of-network Billing for Emergency Care in the United States." NBER Working Paper 23623.

the process and its results. Insurers and providers work out their differences, and there is a nearly even split in independent dispute resolution decisions between insurers and physicians. Lastly, the report found no evidence that New York has inflationary effects and found out-of-network payments are down 13% since the law was enacted.[33]

In contrast, the California law requiring out-of-network rates to be set at the lesser of the median in-network rate, or 125% of the Medicare rates, went into effect on July 1, 2017. Although there is no empirical assessment of the California price setting system, qualitative evidence shows that the mandate rate is struggling to support physicians in the state.[34] In its May 2019 letter to Congress, the California Medical Association (CMA) reported that the current system in California is not working and urged Congress to adopt the New York model. Under California's price control model premiums continue to rise, insurers frequently fail to pay out-of-network physicians usual and customary rates for out-of-network emergency services, and regulators fail to enforce the system. Since enacting the surprise medical billing law in 2016, some insurers terminated contracts unless physicians accepted up to 40% payment reduction. Other insurers closed their networks to new physicians altogether. The California law does not require the use of an independent database for emergency charges and therefore the rates are determined entirely by insurers. In addition, California's dispute resolution process is voluntary, and insurers have refused to engage in dispute resolution. This has led to costly litigation. CMA emphasizes that the California arbitration process is costly and difficult.[35] Furthermore, since California passed its surprise medical bill law, the California Department of Managed Care has reported a 48% increase in patient complaints regarding access to care.[36]

## V. Conclusion

The proposed price control system of S. 1895 is not preferred policy to end surprise medical bills. Surprise medical bills are devastating to patients and should be settled between insurers and health care service providers. There are different approaches to end surprise medical bills. Policymakers and regulators should consider an approach to minimize the economic unintended consequences in the short- and long-term for patients and physicians.

The proposed price control system to set prices for in-network and out-of-network would not work in theory nor in practice. Economic theories show a price control system would create market distortions and reduce economic welfare. In practice, the price control system will create adverse effects on patients, physicians, and hospitals via multiple channels. In the short-term, physicians will reallocate their time from non-patient time to patient time. More than other professions, physicians devote their non-patient time to learning, which enhances patient care. Payment reductions will force self-employed physicians to join hospitals, which will incur higher costs to patients and insurers. A combination of lower payment rates and a continued rising education cost will negatively affect the supply of physicians and exacerbate physician shortages. In the

[33] Corlette Sabrina and Olivia Hoppe. 2019. "New York's 2014 Law to Protect Consumers from Surprise out-of-Network Bills Mostly Working as Intended: Results of a Case Study." Center on Health Insurance Reforms, Georgetown University Health Policy Institute.
[34] Brannon, Ike. 2019. "We Need a True Market Solution to Fix Surprise Billing in Healthcare." Forbes, July 21.
[35] Letter from David H. Aizuss, M.D., President of California Medical Association to California Congressional Delegation on May 20, 2019.
[36] Physicians Advocacy Institute. "Congress Should Use New York's Proven Law as a Framework for Federal Surprise Medical Bills Legislation."

longer-term, the price control system will curb innovation. The quality of care will decline while health care costs will rise. This approach would make current physician shortages worse. In practice, policymakers would have to raise payment rates, not reduce them, to alleviate physician shortages in the U.S. As evidenced above, this rate setting approach is dangerous. The price control system will only disrupt health care delivery.

In addition to the obvious lasting negative impacts of adopting a price controls, there is strong public opposition to this approach. A market-based approach, like New York State's system, will lead to better outcomes for patients, health care providers, and insurers alike. Policymakers would be wise, therefore, to reject legislative proposals that implement a price control system.

## About the Authors

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