October 31, 2019

Dear Senator Warren:

We write regarding the impact of your Medicare for All plan on national health expenditures (NHE) and federal government spending. We have reviewed prior cost analyses, applied existing research literature, and evaluated the specific policy features you have outlined. Based on our analysis, we estimate that your Medicare for All plan will decrease NHE to just under the $52 trillion projected under current law for the ten-year period from 2020-2029 and will require new federal spending of approximately $20.5 trillion over the 2020-2029 budget window.

Prior cost analyses have produced a wide range of cost estimates for Medicare for All, differing by trillions of dollars. The total cost of a Medicare for All system ultimately depends on a series of policy choices, including, for example, the scope of covered benefits, the use (or not) of beneficiary cost sharing, how much providers are paid and under what payment models, the way that drug prices (and other prices) are negotiated and set, and which existing public revenues are redirected toward Medicare for All. A large portion of the uncertainty around the cost of Medicare for All can be resolved by describing such policy features that are not fully specified in the Medicare for All Act of 2019 (S. 1129).

Another factor explaining the wide disparities among cost estimates is that analysts have used different assumptions when trying to predict the behavioral impacts of single-payer insurance on providers, patients, and others – that is, how families, doctors, and hospitals will interact differently with the health care system once Medicare for All is in place, compared to the status quo. Projected NHE varies a great deal with those predicted behavioral changes.

This letter presents our analysis of the specific policy features that you have outlined and explains the methodology underlying our cost estimate. Throughout the letter, we use the Urban Institute’s 2019 estimate of a “single-payer enhanced” plan as a reference point, identifying, where needed, how your plan differs from the plan they modeled. While it is of course the case that any shift to Medicare for All would require a significant transition period, because Urban estimates the costs of a single-payer proposal as if it were fully implemented and at steady-state starting in 2020, we use the same approach in our analysis for ease of comparison.

First, compared to both the current health care system and the single-payer system analyzed by the Urban Institute, your plan would reduce national health expenditures from 2020-2029. Under the “single-payer enhanced” proposal modeled by Urban, NHE would be $59 trillion from 2020-2029, compared to $52 trillion under current law.¹ We find that your proposal’s approach to prescription drug price negotiation, provider payments, administrative spending, and cost growth would bring NHE for the ten-year budget window to just under $52 trillion. This represents a more than $7 trillion reduction in health expenditures when compared

to the proposal modeled by Urban, while still covering the same number of people and providing the same set of comprehensive benefits with no cost sharing assumed in that analysis.

Our analysis also finds that your plan would require less federal spending than the proposal modeled by the Urban Institute. Furthermore, by implementing a maintenance-of-effort requirement for state and local funds currently spent on health insurance, your plan would obtain additional revenue of approximately $6 trillion compared to the proposal outlined by Urban. This brings the total additional federal cost for your proposal to $20.5 trillion, compared to Urban’s $34 trillion.

In summary, your plan would reduce the total amount that the United States spends on health care over the next decade while providing generous insurance coverage for every U.S. resident – 331 million people. Consistent with the Medicare for All Act of 2019, the coverage proposed is generous, includes no cost sharing for physician and hospital visits, and reduces costs for families by approximately $11 trillion. Your proposal also expands home and community-based long-term care services to the full population.

Table 1: Ten-Year Cost Reductions Relative to Urban Institute Projections

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimated Federal Costs and Cost Savings, 2020-29 (in trillions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Estimate of Additional Federal Spending</td>
<td>34.0</td>
</tr>
<tr>
<td>Insurer Administrative Spending</td>
<td>-1.8</td>
</tr>
<tr>
<td>Prescription Drug Reform</td>
<td>-1.7</td>
</tr>
<tr>
<td>Comprehensive Payment Reform</td>
<td>-2.9</td>
</tr>
<tr>
<td>Slowing Medical Costs Growth over Time</td>
<td>-1.1</td>
</tr>
<tr>
<td>Redirecting Other Public Spending on Health Coverage</td>
<td>-6.1</td>
</tr>
<tr>
<td><strong>Estimate of New Federal Spending Required to Fund Warren Medicare for All Plan</strong></td>
<td><strong>20.5</strong></td>
</tr>
</tbody>
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Background

The United States spends a far greater amount per capita on health care than any other nation in the world.\(^4\) American health care costs are higher because the U.S. pays higher prices for hospital care, physician services, medical equipment, and prescription drugs – and because the U.S. has much higher levels of administrative spending.\(^5\) Your plan for Medicare for All reduces NHE while covering more people and providing more generous benefits because it uses the leverage of a single, integrated payment system to address the root causes of our high health spending and to help reduce waste across the system.

Your fully-implemented Medicare for All system adopts all the features of the Medicare for All system described in S.1129, The Medicare for All Act of 2019: a single public insurer covering a comprehensive set of benefits, including long-term care, for all U.S. residents, with virtually no cost sharing.\(^6\) You have also provided additional policy details related to how your plan would handle administration, payment to providers, and payment for pharmaceuticals – details not fully specified in the Medicare for All Act of 2019 – allowing for a more precise cost estimate of your approach to Medicare for All.

In preparing this estimate, we reviewed seven previously published cost analyses that estimate NHE and federal spending under single-payer health insurance reform.

Among the analyses we reviewed, estimates of the impact on NHE vary widely. Two factors explain the substantial disparities among single-payer cost estimates. First, a single-payer program can be prescriptively designed in numerous ways through policy choices around benefits, cost sharing, and payments, which strongly affect both costs and revenue demands. Second, analysts have made different predictive assumptions about changes in utilization of care. Because designs and behavioral assumptions differ, these estimates are not directly comparable to one another.

Because of these differences, it is not surprising that these analyses produce cost estimates varying by trillions of dollars. For instance, estimates of changes in NHE cumulatively over ten years range from a $12.5 trillion decrease (Friedman) to a $7 trillion increase (Urban) when compared to current policies. Estimates of the new federal spending required also vary widely, from a low of $14 trillion (PERI) to a high of $33 trillion (Blahous) and $34 trillion (Urban).\(^7\)

Our goal in this analysis is to produce a conservative, upper-bound estimate of NHE and new federal spending under your Medicare for All proposal. As such, we benchmark our analysis to the Urban Institute estimate, which projects the highest NHE and new federal spending of any published analysis, in addition to including long-term care. We have provided more information about our assumptions and methods in three appendices that follow this discussion.

Table 2: Estimates of Single-Payer Proposals in the United States

<table>
<thead>
<tr>
<th></th>
<th>Urban 2016⁸</th>
<th>Urban 2019⁹</th>
<th>Blahous¹⁰</th>
<th>RAND¹¹</th>
<th>Friedman¹²</th>
<th>Thorpe¹³</th>
<th>PERI¹⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Additional Federal Spending Over 10 Years</strong></td>
<td>$32</td>
<td>$34</td>
<td>$33</td>
<td>$31*</td>
<td>$19*</td>
<td>$25</td>
<td>$14¹⁵</td>
</tr>
<tr>
<td><strong>Additional Federal Spending in Year 1</strong></td>
<td>$2.5</td>
<td>$2.8</td>
<td>$2.5</td>
<td>$2.4</td>
<td>$1.4*</td>
<td>$1.9</td>
<td>$1.1</td>
</tr>
<tr>
<td><strong>Total Federal Spending in Year 1</strong></td>
<td>$3.5*</td>
<td>$4.1</td>
<td>$4.2</td>
<td>$3.5</td>
<td>$2.8</td>
<td>$3.6*</td>
<td>$2.9</td>
</tr>
<tr>
<td><strong>10 Year NHE</strong></td>
<td>$46*</td>
<td>$59¹⁶</td>
<td>$58</td>
<td>$55*</td>
<td>$35</td>
<td>$39*</td>
<td>$39</td>
</tr>
<tr>
<td><strong>Change in 10 Year NHE</strong></td>
<td>$6.6</td>
<td>$7.0¹⁷</td>
<td>-$2.0</td>
<td>$5.1*</td>
<td>-$12.5</td>
<td>-$4.0*</td>
<td>-$5.1</td>
</tr>
<tr>
<td><strong>Utilization Increase</strong></td>
<td>_**</td>
<td>_**</td>
<td>11%</td>
<td>8%</td>
<td>7%</td>
<td>15%</td>
<td>12%</td>
</tr>
</tbody>
</table>

*This number is not provided in the original analysis. The estimate was extrapolated for this letter based on CMS health expenditure projections from data provided in the original analysis.

**Not enough information was provided to accurately calculate this number.

**Policy Feature #1: Insurer Administrative Spending**


¹⁷ Id.
The U.S. health care system has far higher administrative costs than any comparable health care system in the world, and administrative complexity is one of the largest sources of waste in American health care. A major attraction of Medicare for All as a strategy for achieving universal coverage is the ability to significantly streamline that administrative apparatus, potentially saving hundreds of billions of dollars every year.

The cost of administering our health insurance system is higher than other nations largely because of our greater reliance on private insurance companies in the financing of medical care. In 2017, private insurers spent 12.2% of total premiums collected on administrative costs. According to the Medicare Trustees Report, the administrative costs of traditional Medicare (Parts A and B) are 2.3%. In addition to lacking the economies of scale that Medicare enjoys, private insurers incur higher administrative costs due to spending on marketing, executive salaries, brokers and other business costs – and the need to retain a portion of paid premiums as profit. A system built around multiple payers also produces expensive variations and complexities in processes for billing, coding, benefits adjudication, reporting, and measurement.

You propose to set administrative spending at 2.3% of total program costs. This matches the rate of administrative spending in traditional Medicare, which is structured similarly to your Medicare for All program. This level of administrative expenditure is consistent with the levels found in other major comprehensive international health insurance systems, including single-payer systems.

In its base case analysis, the Urban Institute assumes administrative spending of 6%. Using the data provided in Urban’s sensitivity analysis, we find that setting the administrative spending of Medicare for All to 2.3% would decrease NHE and federal spending by $1.8 trillion over ten years.

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years. See Appendix A for further discussion of the literature on administrative spending rates in the existing Medicare program.

Policy Feature #2: Prescription Drug Reform

America pays, on average, nearly four times more for drugs than individuals in other similar countries—up to 60 times more for the same drug. A recent analysis by the House Committee on Ways and Means found that individual drug prices in the U.S. ranged from 70% to 4,833% higher than the combined mean price for that same drug in 11 other similar countries. In 2016, annual pharmaceutical spending per capita was $1,220 in the U.S., driving $457 billion in spending on combined retail (dispensed at the pharmacy) and non-retail (dispensed in physician offices) drugs.

Your Medicare for All plan addresses prescription drug costs and availability with a series of reforms affecting payment for drugs, competition and the patent system, and innovation in drug development. You propose a net savings target of 70% below current Medicare prices for brand name prescription drugs and a net 30% reduction in Medicare prices for generics, which you propose to achieve by using a suite of policies—primarily through price negotiation, backed by compulsory licensing and generic manufacturing where necessary. Given that U.S. prices are 3.7 times higher, this reduction, when done in a balanced manner that targets high-cost branded and generic drugs, would bring U.S. branded drug prices more in line with similar high income countries. Presented another way, this proposal would aim for overall average prices for branded drugs slightly below current Medicaid prices. As such, this price reduction essentially extends the decades of savings to Medicaid on drugs relative to other payers due to its inflation rebate, which requires manufacturers to refund Medicaid the difference in price increases above inflation, translating those inflation-pegged prices to drug spending across the rest of the population. Though aggressive, we believe this savings target can be achieved using the policy tools you have outlined. We also note that because your Medicare for All proposal will increase the utilization of drugs by improving access, the change in overall pharmaceutical spending will be less significant than the change in unit prices.

Prescription Drug Price Negotiation
You propose a negotiation mechanism for prescription drugs based on H.R. 3, the Lower Prescription Drug Costs Now Act, H.R. 1046, the Medicare Negotiation and Competitive Licensing Act of 2019, and S. 3375, the Affordable Drug Manufacturing Act. Specifically, your approach adopts the negotiation mechanism in H.R. 3, utilizing excise taxes as an incentive to

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25 Id.

26 Id.

27 Id.

bring manufacturers to the table to negotiate prices. However, your approach strengthens these negotiation parameters by (i) including both branded and generic drugs in the negotiation process; (ii) reducing the maximum price to 1.1 times the average international market (AIM) price from 1.2 times the AIM in H.R. 3; (iii) eliminating the limit on the total number of drugs for which the Secretary can negotiate; (iv) removing requirements that the Secretary shall accept the target price linked to the lowest price in one of the six reference countries; and (v) adding an inflation rebate, similar to that in Medicaid.

This approach would allow Medicare for All to negotiate appropriate price reductions for drugs, recognizing that different drugs would individually experience different reductions in price. We anticipate that most of these savings will derive from reductions in spending on brand name drugs. Given its three-year phase in, CBO estimates that H.R. 3 would save Medicare Part D $369 billion over the 2023-2029 window. As Part D Spending was only $154 billion of the $333 billion of retail drug spending in 2017, we project that the budgetary savings achieved by the negotiation mechanism in H.R. 3 would be significantly higher if applied to the entire population under a single-payer system that is reimbursing at Medicare rates (see Appendix C for further discussion). Moreover, we project that your proposal would generate savings beyond those implied by the CBO estimate, because your plan incorporates generic drugs and makes several design changes that strengthen Medicare for All’s negotiating power.

**Reducing Costs Further while Ensuring Access when Negotiation Fails**

In the event that negotiation fails and a manufacturer chooses not to sell the drug in the U.S., you propose to fall back on the compulsory licensing and government manufacturing provisions of H.R. 1046 and S. 3375. This will ensure patient access to medicines by allowing the government to either override the patent and licensing it to another manufacturer or provide government support for manufacturing these drugs. These tools are likely to be most effective in cases where manufacturing processes can be quickly implemented by other producers. Because these levers allow for alternate manufacturing for small molecule drugs, they reduce companies’ ability to put pressure on price negotiations by threatening to leave the U.S. market. We therefore expect this backstop to drive down negotiated costs and improve access to medications.

**Pharmaceutical Innovation and Health Improvement under Medicare for All**

You also indicated your intention to use the monopsony power of Medicare for All to increase the utilization and better incentivize the development of drugs that improve health and reduce long-term costs, including in areas such as cancer cures, antibiotics, and vaccines. We believe this approach would lead to increased research and development on these products – improving overall health and reducing system-wide costs.

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Due to market failures, our current health system does not incentivize the development or reimbursement of less expensive drugs with better long-term effects on cost and health (like antibiotics) or long-term research (like early-stage cancer cures).\textsuperscript{31} As the purchaser of prescription drugs for the entire U.S. population, Medicare for All has the power to fundamentally realign incentives, increase innovation, and drive the development of more socially beneficial drugs.

Private health insurers are not incentivized to pay for cures in the form of drugs that may cost more up front but ultimately help patients and provide significant long-term economic benefit to society by lowering overall health care costs. Because insurance is tied to employment in the U.S., many individuals often move health insurance plans when they change employment – which was one-quarter of the workforce in 2018.\textsuperscript{32} Non-group plans also experience significant churn.\textsuperscript{33} As such, a private insurer who pays for a costly treatment or cure will probably not realize the economic gains that accrue from averting the need for more expensive care later in that patient’s life. Under Medicare for All, early investments in upstream care could pay off downstream, not just in health and wellbeing, but also financially.

As a single-payer, Medicare for All would rebalance innovation incentives that are currently skewed due to the many disparate payers in our health care system.\textsuperscript{34} Furthermore, the entity that pays for the drug is also the entity that realizes the economic payoff later, making the drug worth higher spending in the long run due to lower health care costs. And because the U.S. patent system and exclusivity regime grants monopolies to drug manufacturers, these companies will have an automatic customer base of 331 million people in a Medicare for All system. Because our overall estimate is a conservative one, we do not estimate the potential cost savings from this alignment of incentives, but we do acknowledge that they have the potential to be significant.

By our analysis, Urban’s 25-30\% reduction to Medicare payments for prescription drugs would result in around $60-$65 billion annual savings relative to the current law baseline, or around $770 billion over the budget window. Because your policy holds generic price reductions at that 30\%, we do not estimate any additional savings on generic drugs. However, we estimate that total savings from a 70\% reduction below Medicare branded drug payments, driven by the reforms you outline combined, are \textbf{\$1.7 trillion} beyond those already captured in Urban’s estimate.


Policy Feature #3: Comprehensive Payment Reform

Medicare for All has tremendous potential to improve the health care payment system in the U.S. Your Medicare for All plan resets and rebalances payment rates to health care providers and embraces a series of payment reforms to improve Medicare. Importantly, Medicare for All will allow a speedier and more comprehensive transition from today’s fee-for-service payment models to models of value-based payment and population-based budgets that can encourage much more focus on the needs of patients and families, improving the quality and continuity of care, reducing administrative complexity, and investing in prevention and supports to people with chronic illness and behavioral health care needs. Such a reformed payment system will both improve care and reduce costs.

Hospital and Provider Administrative Costs

Hospitals, physician practices, and other health care providers incur significant administrative costs interacting with our current complex and fragmented private insurance system. According to a report from the Institute of Medicine (IOM; now known as the National Academy of Medicine), billing and insurance-related (BIR) administrative expenses are estimated to be 13% of revenue for physician practices, 8.5% of revenue for hospitals, and 10% of revenue for other providers. A recent study using time-driven, activity-based costing corroborates the IOM figures, finding BIR costs equivalent to 14.5% of professional revenue for primary care visits, 8.0% for inpatient medicine visits, 13.4% for ambulatory surgical procedures, and 25.2% for emergency department visits. Based on the IOM figures, RAND estimates that in 2019 BIR costs for providers totaled $279.4 billion, or 7.3% of NHE. (Note that this is separate from and in addition to administrative spending by public and private insurers, estimated at $301.4 billion in 2019, or 7.9% of NHE).

Comparing the administrative burden on providers in the U.S. and Canada, the IOM report estimated that providers in the Canadian single-payer system had half the BIR costs as providers in the U.S. system. A subsequent study found that the administrative costs incurred by Canadian physician practices interacting with the Ontario single-payer were 73% lower than the administrative costs incurred by American physician practices interacting with multiple public insurers.

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38 Id.
and private payers. These administrative savings should be incorporated into the overall analysis of the impact that Medicare for All would have on providers.

**Physician Payment**

Your proposal would set reimbursement for physicians and non-hospital providers at 100% of current Medicare rates, which is consistent with the single-payer proposal modeled by Urban. Your proposal would also implement a budget-neutral rebalancing of rates that increases reimbursement for primary care and reduces reimbursement to overpaid specialties. For hospitals that serve large Medicaid populations, this change would actually increase reimbursement for that patient population by raising rates to Medicare levels. The average all-payer rate for physician payment – weighted between commercial insurance, Medicare, and Medicaid – has been estimated to be 107% of current Medicare rates. All else equal, this implies that setting physician payment at 100% of current Medicare rates would represent a 6.5% reduction in gross income for physician practices. If Medicare for All allows physician practice BIR costs (13% of revenue) to fall to Canadian levels (73% decrease), physician practices would recoup 9.5% of revenue on average, meaning that net incomes of physician practices would increase on average. Alternatively, if Medicare for All allows physician practice BIR costs to fall by half, physician practices would recoup 6.5% of revenue, helping substantially to offset the income loss from payment at 100% of current Medicare rates.

To exert genuine financial pressure on physicians – rather than set rates that primarily serve to recoup BIR savings – a single-payer system could set physician payment rates below current Medicare rates. Your proposal to set physician payment rates equal to Medicare rates under current law puts little if any pressure on aggregate physician incomes and physician practice spending, when reasonable BIR cost savings are assumed. For individual physician practices, the net impact will depend importantly on specialty and payer mix: in particular, Medicare rates are lower than current private insurance rates, but higher than the rates paid by Medicaid and the Children’s Health Insurance Program, which cover 72 million individuals.

In financial terms, reduced administrative burden benefits physician practices in two ways: increased time to spend on reimbursable patient care and decreased expense on administrative staffing. One study estimated that physicians in outpatient settings currently spend nearly one hour per workday interacting with health plans; this time is primarily spent on navigating the formulary requirements of different insurers and on submitting prior authorizations. Under Medicare for All, physicians would gain back much of this time for additional patient care, increasing their billable hours. For each physician, nursing staff spends an additional 21 hours

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per week interacting with insurers (including 13 hours on prior authorizations) and clerical staff spends an additional 53 hours interacting with insurers (including 45.5 hours on claims and billing tasks). These administrative requirements would be substantially relieved by Medicare for All.

Your proposal to pay physicians at 100% of current Medicare rates matches the policy modeled by Urban, so there is no impact on NHE from this policy feature compared to Urban.

Hospital Payment
High and rising hospital prices are among the greatest threats to the financial sustainability of the U.S. health care system. A central attraction of single-payer health insurance reform is the ability to reduce the price of hospital care. You propose to pay hospitals at an average of 110% of current Medicare rates under Medicare for All, consistent with the current Medicare program including existing geographic adjustments, and with additional appropriate adjustments for hospitals with unique or challenging cost structures, like rural hospitals, teaching hospitals, and others. Compared to Urban’s single-payer proposal which reimburses at 115% of Medicare rates, your proposal reduces NHE by $0.6 trillion over ten years.

To evaluate the impact of these rates on hospitals, it is important to analyze how hospital costs have evolved over time. In the period from 1996 to 2001, private insurer payment rates to hospitals were approximately 110% of Medicare rates, resulting in a blended rate below your current proposal. This difference has widened enormously, however, since 2001, with private insurer payment rates reaching 175% percent of Medicare rates by 2012. According to one recent study, private sector hospital prices are now 240% of Medicare rates. This growing gap is driven by rapidly rising prices in the private sector; for instance, between 2007 and 2014 inpatient hospital prices for the private market increased by 42%. This increase in hospital prices for the private sector reflect several trends in the U.S. health care system, including the swift (and ongoing) consolidation of the hospital sector, which by 2016 had left 90% of Metropolitan Statistical Areas designated as highly concentrated for hospitals.

This rapid increase in private-payer hospital payment rates has led to higher hospital costs. As explained by MedPAC, when providers “receive high payment rates from insurers, they face less pressure to keep their costs low.” In other words, when private insurers are unable to exert financial pressure on certain hospitals, these hospitals develop inflated cost structures. After all,

44 Id.
46 Id.
it is far simpler for a hospital to raise prices than to control costs and achieve operational efficiencies.

It is in this context that hospitals in 2017 reported average Medicare margins of -9.9%. This implies that paying hospitals at 110% of Medicare rates would approximately cover the current costs of care. However, as outlined above, hospitals’ reported costs of care reflect decades of low financial pressure from private insurers, leading to significant inflation in these reported costs. (As a point of comparison, MedPAC tracks a cohort of “relatively efficient” hospitals that consistently perform well on measures of cost and quality. In 2017 the Medicare margins of these hospitals were -2%, implying that 102% of current Medicare rates would be sufficient to cover the costs of an efficient hospital.)

Hospital Costs
Your approach to pay hospitals at 110% of Medicare rates would approximately cover the current costs of care reported by hospitals. Importantly, by exerting financial pressure on hospitals that have relied on high private-payer rates to avoid controlling costs and searching for efficiencies, your policy would be expected to drive greater efficiencies in the hospital sector than seen in the current system, resulting in lower hospital costs.

Furthermore, Medicare for All would allow hospitals to achieve savings on administrative costs and drug costs and would generate additional hospital revenue by eliminating uncompensated care and increasing access to care. These four financial benefits would allow the hospital sector to generate positive margins at payment rates that are designed to cover current operating costs. Although Urban does not consider these factors in its analysis, the single-payer program that it models does implicitly deliver these same savings.

Administrative costs
Administrative costs account for over 25% of U.S. hospital expenditures, including 8.5% of revenue spent directly on billing and insurance-related (BIR) costs. If single-payer insurance reform allows these BIR costs to fall by half, Medicare for All would decrease hospitals’ operating costs by more than 4% compared to the current system.

Prescription drug prices
In addition to reducing the price of drugs obtained by patients in pharmacies, Medicare for All would reduce the price of drugs purchased by and administered in hospitals. Drug costs are a growing concern for hospitals: average drug spending per admission increased 18.5% from 2015 to 2017, far above the rate of medical cost growth. Nearly two-thirds of hospitals reported that rising drug prices had a moderate or severe impact on their ability to manage hospital budgets. Medicare for All would decrease hospital operating costs by lowering these prices.

51 Id.
54 Id.
Elimination of uncompensated care
By providing universal coverage with no cost sharing for hospital services, Medicare for All would essentially eliminate uncompensated care. The American Hospital Association reports that uncompensated care accounts for 4.2% of total hospital costs. Hospitals would recoup these costs under your policy, getting reimbursed at 110% of current Medicare rates for all care.

Increased access to services
By providing health coverage to 32 million uninsured U.S. residents and by eliminating cost sharing, Medicare for All would allow more patients to access and use hospital services. For hospitals, this increased access means increased volume and enhanced revenues. This new utilization would be particularly beneficial for hospitals’ financial outlook: because hospitals have high fixed costs, hospitals’ marginal profit per patient at current Medicare rates is 8%. Furthermore, hospitals in most areas appear to have excess capacity to absorb additional volume; in 2017, the average hospital occupancy rate was 62.5%.

Taken together, the slate of financial benefits delivered by Medicare for All – lower administrative costs, lower drug costs, eliminated uncompensated care, and increased access to care – would allow hospitals to generate positive margins under your plan.

Rural Hospitals
Some critics have worried that rural hospitals would be more vulnerable to closure under Medicare for All than under our current system. On the contrary, universal coverage is perhaps the most powerful strategy to protect the financial sustainability of rural hospitals. First, rural hospitals have a larger payer mix of Medicare and Medicaid patients than other hospitals, meaning that a shift to 110% of Medicare rates will be a significant payment bump that makes up their -8.2% Medicare margins. Higher rates of health insurance coverage are a significant boon to hospitals: for instance, the Affordable Care Act’s Medicaid expansion was associated with improved hospital financial performance and fewer closures, particularly in rural areas. In rural areas and small towns located in states that have not expanded Medicaid, the uninsured rate is

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Covering this population under Medicare for All would be an enormous benefit to both the patients and hospitals in these areas.

**Payment Flexibility**

Some critics of Medicare for All plans worry that vulnerable hospitals and providers, such as in rural and safety-net care systems, could be more vulnerable under a single-payer system. We point out that, as a policy matter, the opposite can be true. With proper monitoring of the status of these critically important institutions, Medicare for All can and should, over time, make targeted adjustments to payment levels to better support the vulnerable institutions and reallocate payments from those that are experiencing very high margins to those that are struggling. That type of adjustment is not possible in the current, complex, multi-payer system.

**Increased Antitrust Scrutiny on Hospitals**

Recent evidence suggests that concentrated hospital markets (i.e. after mergers) result in higher prices for care. Furthermore, evidence finds that the quality of care and patient satisfaction decreases when a hospital market becomes less competitive. Given evidence from other single-payer systems, we know that patients respond to perceived care quality and interpersonal interaction with providers when markets are more competitive. Hospital competition will be an important feature of a single-payer system to ensure that providers are competing for patients on the basis of care quality and experience.

You propose to better fund U.S. antitrust enforcement efforts to evaluate hospital market competition and mergers to protect patient choice among providers. You also propose allowing hospitals to voluntarily divest holdings to restore competition to U.S. hospital markets. While there is reason to believe that increased competition would lower prices and create savings, even when a government payer is regulating prices, we do not in this letter estimate any specific savings in national health spending from increased competition in provider markets.

**Payment Reforms to Medicare**

As part of your Medicare for All proposal, you enact a set of payment reforms to improve Medicare’s system of paying providers that were not part of the single-payer system analyzed by Urban. These reforms, when taken at the CBO estimate for Medicare and applied to a U.S. single-payer population, lead to a total of **$2.3 trillion** savings below the Urban projection over the ten-year window.

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● **Site neutral payments.** Paying all hospital-owned physician offices located off-campus at the physician office rate will reduce costs in Medicare for All by $0.5 trillion.

● **Post-acute care reforms.** Making post-acute payments budget neutral, risk adjusted, and set prospectively on an annual basis with episode grouping will reduce costs in Medicare for All by $0.5 trillion.

● **Bundled payment reforms.** Instituting bundled payments for inpatient care and 90 days of post-acute care will reduce costs by $1.2 trillion.

While the site neutral and post-acute payment reforms are pure extrapolations of the CBO analysis, we further adjusted the bundled payment extrapolation to reflect the desired policy outcome of reducing this spending. Given the increase in hospital payment rates under this policy as compared to the Medicare program on which CBO’s analysis is based and the shift of a large population out of private insurance (that more actively manages utilization) into a fee-for-service system, the policy proposed an additional reduction to achieve the spending aim. Evidence demonstrates that this spending is significantly higher in fee-for-service Medicare when compared to Medicare Advantage.

**Moving Away from Fee-for-Service**

Numerous tests of value-based payment models under the Affordable Care Act, such as expanding bundled payment and various forms of Accountable Care Organizations (ACOs), have already yielded many lessons about savings and improvements achievable with new payment models. Your proposal will allow for rapid building on those lessons and for accelerated progress toward even more productive, new payment models including global budgets for health care systems and full-risk population-based payment models. Medicare for All can be a powerful force for such change toward paying for value to patients rather than volume of care.

We estimate that new payment models can achieve better care for patients and much lower costs of care. Urban did not attribute savings to those effects of Medicare for All. These new payment models are widely recognized as important vehicles for improving care while reducing costs, and while we do not estimate the cost impacts associated with these specific reforms, we believe they would produce meaningful savings. However, we have not claimed these savings here because our current fragmented system has made their implementation challenging, which in turn makes accurately estimating their cost-saving ability challenging.

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65 Id.


The bulk of these savings would come from reduced use of hospital care and post-acute care as integrated care systems substitute it with much better forms of care, such as home-based services, primary care homes, telehealth services, community-based paramedicine, self-care opportunities, community-based supports, and strengthened behavioral health care – all of which will be stronger under the comprehensive benefit structure of Medicare for All. As one example of such progress, one integrated health care system in the U.S. now claims that more than 50% of all patient encounters with doctors are telemedicine visits, saving time and money and producing much more responsive care. A surge of interest is developing in “hospital at home” alternatives to costly and risky in-hospital stays. Similarly, progress is rapid now in understanding “Age-Friendly Health System” care, which can improve outcomes for elders, who otherwise might spend long and costly periods in hospitals. And community paramedicine is changing the entire role of ambulance services from mere transport services to outreach care systems capable of preventing unneeded trips to the hospital. Medicare for All can and should accelerate progress on innovations such as these, which lower cost and are better for patients.

While they are not the only advanced payment model worth exploring, Medicare ACOs have already demonstrated their success. McWilliams (2018) finds that physician-group Medicare ACOs lowered utilization of hospital care, emergency department visits, post-acute facility stays, and days in post-acute facility. After accounting for bonus payments, the total savings to Medicare amounted to 2.4% of total spending for the cohort enrolled in the program for at least three years.

ACOs are likely to be more effective in a single-payer system than they are in the existing multi-payer system, where it is common for patients to “churn” between different insurance plans as their income or job status changes, or when their employer decides to change the plans on offer. In one study, over the course of one year only 62% of patients on Medicaid were continuously enrolled in a Medicaid plan, and only 47% of patients with individually purchased private coverage and 72% of patients with employer-sponsored coverage were continuously enrolled. This churn frequently causes disruptions in patient care, and also counteracts the ACO incentive structure by discouraging investment in programs that reduce costs only over the long

72 Id. (Savings calculated from data provided in Table 3, applied to the pre-entry mean.)
term. In a single-payer system, people would be enrolled in Medicare for All for life, which incentivizes investments that both improve health and save money over the long term.

The total savings from these reforms are **$2.9 trillion**:
- Paying hospitals 110% of current Medicare rates: $0.6 trillion
- Savings from other payment reforms: $2.3 trillion

**Policy Feature #4: Slowing Medical Costs Growth Rates over Time**

In recent decades, U.S. health spending has consistently grown at rates above GDP growth, rising from 6.9% of GDP in 1970 to 17.9% of GDP in 2017. Historically, U.S. spending growth for health consumption expenditures was notably higher than similar countries’ spending growth. The United States’ higher spending compared to that in other countries is largely based on the wide divergence in this cost growth in previous decades.

The proposal you outline will certainly work to lower cost growth over time. In addition to the policies above, we anticipate that a shift to Medicare for All will reduce growth over time from that level. This is due to the aggressive approach you take on brand name drug pricing and your shift from fee for service across the system by implementing various payment reforms to better manage care. The Center for Medicare and Medicaid Services projects 5.5% cost growth over roughly the next decade. Using Urban’s growth of the 2020 increased federal spending to the ten-year figure, we inferred a 4.5% growth rate for their projection of total ten-year NHE. However, we look to other single-payer systems like Taiwan, which has effectively slowed growth to 3.2% on average in recent years, since transitioning from a private insurance system. We believe future growth will fall in line with U.S. GDP, which CBO projects to be an average of 3.9% for the next decade. In addition, this growth rate falls close to the WHO’s estimates of health care spending growth in high-income countries, which has been around 4% annually.

And if costs do grow above GDP, you have several policy levers you could choose to exercise to keep them near GDP growth, including global budgets, population-based budgets, and automatic rate reductions. To estimate the savings from this lower growth rate, we first took the full set of cost reductions that result from your proposal so as to avoid double counting savings by reducing the base year funding levels. Then, we applied that number to total 2020 NHE of $3.7 trillion.


(see Table 3). We find that this change to the growth rate results in **$1.1 trillion** in savings when compared to Urban’s estimate.\(^{80}\)

### Table 3: 2020 NHE Savings under Warren Medicare for All Plan

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimated Expenditures and Savings (in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Estimate of 2020 NHE</td>
<td>4,216.5</td>
</tr>
<tr>
<td>Insurer Administrative Spending</td>
<td>-143.9</td>
</tr>
<tr>
<td>Prescription Drug Reform</td>
<td>-133.3</td>
</tr>
<tr>
<td>Comprehensive Payment Reform</td>
<td>-208.4</td>
</tr>
<tr>
<td><strong>2020 Estimate of NHE under Warren Medicare for All Plan</strong>*</td>
<td><strong>3,730.8</strong></td>
</tr>
</tbody>
</table>

*Excludes $534.3 billion in spending on items outside the Medicare for All program, like health spending by the Department of Defense, Veterans Affairs, Indian Health Service, and federal, state, and local public health agencies. Urban excludes these same spending categories from the main analyses included in its report and so we have done so here for ease of comparison. It is true that the 2020 NHE estimate under this policy is higher than the estimate under current law, but total NHE over the ten-year budget window is just under the $52 trillion projection under current law.

### Total National Health Expenditure Savings of Warren Medicare for All Plan

### Table 4: NHE Changes, 2020-29

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimated Savings (in trillions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Estimate of NHE</td>
<td>59</td>
</tr>
<tr>
<td>Insurer Administrative Spending</td>
<td>-1.8</td>
</tr>
<tr>
<td>Prescription Drug Reform</td>
<td>-1.7</td>
</tr>
<tr>
<td>Comprehensive Payment Reform</td>
<td>-2.9</td>
</tr>
<tr>
<td>Slowing Medical Costs Growth over Time</td>
<td>-1.1</td>
</tr>
<tr>
<td><strong>Estimate of NHE in Warren Medicare for All Plan</strong></td>
<td><strong>52</strong></td>
</tr>
<tr>
<td><strong>Current Law Projections for NHE</strong></td>
<td><strong>52</strong></td>
</tr>
</tbody>
</table>

*Total NHE estimates rounded to the nearest trillion.

Based on the analyses above, we estimate that your Medicare for All proposal would reduce NHE to just under the $52 trillion projected over ten years under current law.\(^{81}\) Thus, your proposal would cover every single resident of the U.S. with much more generous coverage and

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\(^{80}\) Using Urban’s 2020 increased federal spending growth to the ten-year figure, we inferred a 4.5% growth rate.\(^{81}\) Projected NHE savings under your approach range from $100-$500 billion over the period from 2020-2029. However, in order to be conservative, we are projecting 10-year NHE to be substantially equal to Urban’s projection under current law.
virtually no cost sharing at a total cost just under the amount the U.S. is currently set to spend on health care under our existing system.

**Policy Feature #5: Redirecting Other Public Spending on Health Coverage**

The policies outlined in your Medicare for All proposal would redirect $6.1 trillion of existing state and local government spending on health care into the Medicare for All system. This maintenance-of-effort is comprised of two funding streams: $3.4 trillion in Medicaid and the Children’s Health Insurance Program (CHIP) funding and $2.7 trillion in employer contributions to private insurance premiums of government employees. These amounts total $6.1 trillion in additional revenue over the ten-year window.

**Conclusion**

In total, we estimate that your proposal will decrease NHE to just under the $52 trillion projected under current law for the ten-year period from 2020-2029 and will require new federal revenues of approximately $20.5 trillion over the 2020-2029 budget window, as shown in Table 1. We expect this suite of policies to expand care to 32 million U.S. residents who are currently uninsured and improve the health benefits available to many millions more, drastically improving their health and well-being.

While our findings of the policies you outlined are based on strong analysis using publicly available data, we do note that, like the other estimates, our projections contain some assumptions that could influence these numbers. However, we have not counted any potential savings from realigning innovation incentives, provider-led care policies like ACOs, or an adjustment to the utilization assumptions in Urban’s work. This more measured approach suggests that the total savings to the health system may be higher (and thus, total federal revenues required may be lower) than $20.5 trillion relative to Urban’s projections.

Sincerely,

**Dr. Donald M. Berwick**
Former Administrator of the Centers for Medicare and Medicaid Services (CMS), under President Barack Obama, President Emeritus and Senior Fellow at the Institute for Healthcare Improvement, and Lecturer in the Department of Health Care Policy at Harvard Medical School

**Simon Johnson**
Former Chief Economist, International Monetary Fund and Ronald A. Kurtz (1954) Professor of Entrepreneurship Sloan School of Management, MIT

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82 See Appendix C for more information.
APPENDIX A: Medicare Administrative Costs

Why have some analysts assumed that Medicare for All would have administrative costs of 6%? Five arguments have been made as to why Medicare for All’s administrative costs should be assumed to be higher than traditional Medicare.

Claim 1: Medicare’s reported administrative costs are falsely low because they fail to count relevant categories of administrative spending: the costs of collecting taxes or Part B premiums, the costs of claims processing by private intermediaries in the Medicare fee-for-service program, the salaries of CMS employees, and the building costs incurred by CMS.

These assertions are incorrect. Medicare’s administrative costs are reported annually in the Medicare Trustees Report. Among other categories, the following are counted as administrative costs: salaries and expenses of CMS, expenses of Medicare Administrative Contractors, and the administrative costs incurred by the Department of the Treasury (including the Internal Revenue Service) and the Social Security Administration in collecting taxes and premiums for the Medicare program. Sullivan (2013) provides the definitive scholarly treatment of the misunderstanding surrounding the reporting of Medicare’s administrative costs.

The administrative costs incurred by private Medicare Advantage plans in the Part C program and private plans in Part D are not included in the Medicare Trustees Report, which is why we have excluded Parts C and D from our report of traditional Medicare’s administrative costs. As a percentage of Medicare’s overall expenditures – Parts A, B, C, and D – the administrative costs incurred by the federal government are 1.3%, with the remainder incurred by private plans. Within the traditional Medicare program (Parts A and B, excluding Part C benefits), the administrative costs incurred by the federal government are 2.3%, with no additional administrative costs incurred by private plans.

Claim 2: Medicare’s administrative costs appear low only because the elderly have higher medical needs and higher total spending, and so the percentage of administrative spending is misleadingly low given the inflated denominator.

If this claim were true, administrative costs in Medicare Advantage (MA) should also be low, given that these plans serve the same elderly population as traditional Medicare. However, the claim is refuted by the fact that MA plans have administrative costs comparable to or even higher than private insurers in the under-65 market – the most recent Government Accountability Office report on the subject found that Medicare Advantage plans had administrative costs of 13.7%.

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85 MEDICARE ADVANTAGE: 2011 Profits Similar to Projections for Most Plans, but Higher for Plans with Specific Eligibility Requirements. Government Accountability Office; 2013,
This suggests that management by a private insurance company – not the age of beneficiaries – drives high administrative spending.

Claim 3: Medicare’s overall administrative costs are about 6%, and Medicare for All estimates should assume this figure.

The Urban Institute justifies its assumption of 6% administrative costs by stating: “We base our administrative cost estimates on Medicare’s costs to administer the entire Medicare program.” Because roughly one third of Medicare beneficiaries are enrolled in private MA plans, in 2017 the weighted average of administrative costs over the entire Medicare program was about 6%. But Medicare for All beneficiaries would all be enrolled in a public plan with restrictions on administrative expenses, so a figure based on having a third of beneficiaries in a private insurance alternative whose administrative expenses are not currently restricted is not relevant.

Claim 4: The administrative requirements of Medicare for All would be so large that current levels of administrative spending would need to increase.

The Urban Institute report states that “far too many administrative functions must be conducted” for administrative spending to fall below 6% under Medicare for All, citing the need to set rates for providers, process claims, promulgate regulations, and monitor for fraud. The obvious flaw in this argument is that traditional Medicare already performs all of these functions with administrative spending of 2.3%, according to our calculations. It is reasonable to expect administrative spending to expand proportionally as health care spending increases, but there is no convincing argument that administrative spending would increase exponentially.

Claim 5: While it is technically possible to restrict administrative costs, it is unwise to do so because it will encourage excess utilization.

While there is certainly room for thoughtful discussion about the ideal level of administrative spending for a large public insurer, there is significant independent evidence suggesting that Medicare’s current levels of administrative spending are more than adequate even under a national system.

The first line of evidence comes from international health systems. A recent comprehensive analysis of eleven countries found that in countries other than the U.S., the average costs of administering the insurance system are 2.7% (compared to 8% in the U.S.). Countries in the study with administrative spending above 3% – like Germany and Switzerland – use private

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https://www.gao.gov/assets/660/659836.pdf. The figure reported here includes nonmedical expenses and profits in Table 1.


insurers comparatively more, while the single-payer systems had administrative costs between 1% and 3%. When looking at these other countries there is little evidence that a single-payer program needs to have administrative costs above traditional Medicare in order to operate effectively.

The second important piece of evidence is the study by Wallace and Song which demonstrated that when people with private insurance turn 65 and enter traditional Medicare, there is no unusual increase in their utilization of services tied to their enrollment – despite the fact that traditional Medicare has administrative costs that are approximately one-fifth of administrative costs in private insurance.

A final consideration is that Medicare’s increasing reliance on alternative payment models may obviate the need for many of the tactics traditionally used by payers to restrain utilization, instead building these incentives directly into payment models.

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APPENDIX B: Predicting Health Care Utilization under Medicare for All

A key element in estimating how Medicare for All would affect NHE is predicting how patients will respond to changes in health coverage in terms of their utilization of health care services.

Five of the seven cost estimates we reviewed projected utilization increases between 7% and 15% under Medicare for All as compared to current law. The two Urban Institute reports do not provide an estimate of how overall health care utilization would change under Medicare for All, although such a utilization change is implicit in their estimate of total spending. Urban’s 2019 report estimates that total health care spending will increase by 20.6% in 2020 [Table 13]. This predicted spending increase occurs in the context of reduced prices for care, given that Urban modeled a policy with reduced prices compared to current law for hospital care, physician services, and prescription drugs (in addition to estimating lower costs for health plan administration). Because Spending = Price x Utilization, the utilization increases implied by the Urban report are above 20.6% for 2020. Without further information from the Urban Institute, it is not possible to infer how much higher the utilization projections are above the spending projections.

The figures in the above paragraph are for aggregate utilization increases, combining increases that result from covering the uninsured, eliminating cost sharing, and covering new benefits including LTSS. Excluding LTSS, Urban estimates a spending increase of 13.8% in 2020, which means the implied utilization increase for non-LTSS services is above 13.8% for 2020 (Again, with the provided information it is not possible to infer how much higher the utilization projections are above this spending projection.)

Because Urban does not provide estimates for utilization increases – neither overall nor for different populations – it is difficult to conduct a proper evaluation of the utilization predictions made by Urban’s model. There is recent peer-reviewed literature on the effects of covering the uninsured and on the impact of health insurance deductibles that would be useful to compare against the predictions made by Urban’s microsimulation model. While we cannot conduct a thorough evaluation without further information from the Urban Institute, we note that the utilization predictions implied by the Urban estimate fall at the high end of the published literature. As such, we consider the estimate provided in this letter – which implicitly relies on the utilization predictions made by Urban – to represent an upper bound on projected NHE under Medicare for All. In terms of sensitivity to these predictions, NHE over 2020-2029 would decrease by approximately $1 trillion for each 2 percentage points that actual utilization levels turn out to be below the levels predicted by Urban.

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91 Calculation based on data provided by Urban Institute study authors that $238.3 billion of the spending increase in 2020 is attributable to LTSS.

APPENDIX C: Assumptions and Methodology

Benchmark single-payer estimate
Our analysis uses the Urban Institute’s October 2019 estimate of a “single-payer enhanced” system (Reform 8) as the benchmark to which additional policy changes are compared. Urban’s Reform 8 consists of a single-payer system with no cost sharing at the point of care and a comprehensive benefit package, including dental, vision, hearing, and home- and community-based long-term services and supports. Urban’s Reform 8 provides coverage to all U.S. residents, including undocumented immigrants. These reforms are consistent with the statutory requirements for a fully-implemented single-payer system laid out in S. 1129, The Medicare for All Act of 2019. Urban estimates that its Reform 8 would increase federal government spending by $34 trillion over ten years and $2.8 trillion in 2020.

Medicare for All administrative costs
Medicare for All administrative costs are set based on the percentage of administrative spending in traditional Medicare. The source of this data is the 2019 Medicare Trustees Report, Table II.B1, and is calculated for Parts A and B: (5.2+4.2)/((303-101.7)+(333-131)). Note that this excludes Part C benefits. Urban’s sensitivity analysis 8-3 provides an estimate of the savings achieved by reducing the administrative spending of Medicare for All from 6% to 3%. We extrapolate from this figure to calculate the savings achieved by reducing the administrative spending of Medicare for All from 6% to 2.3%, amounting to $1.8 trillion in savings over ten years.

Hospital payment rates
Hospital payment rates are decreased to 110% of current law Medicare rates, approximately in line with average reported hospital costs per MedPAC analysis. This is a 5 percentage point decrease from the single-payer proposal modeled by the Urban Institute, which adopts hospital payment rates at 115% of current law Medicare rates. We calculate the savings from this policy change by referencing Urban’s sensitivity analysis 8-1, which estimates the spending change that results from increasing hospital payment rates by 35 percentage points (from 115% Medicare to 140% Medicare). We use this figure to calculate the spending change that results from decreasing hospital payment rates by 5 percentage points (from 115% Medicare to 110% Medicare), which amounts to $574 billion over 10 years.

Payment Reform to Medicare Fee-for-Service
The Urban Institute’s microsimulation uses data from current Medicare payment and commercial insurers to simulate rates in Medicare for All in elderly and non-elderly populations, respectively. These rates weight towards a fee-for-service (FFS) reimbursement model, which is the traditional model in the U.S. system. CBO has estimated the savings to the Medicare program for a series of payment reforms that adjust spending in Medicare FFS. To estimate the savings generated by applying these payment reforms to a full single-payer system, we multiply extrapolated CBO estimates by the ratio of single-payer spending in Urban’s model divided by net Medicare spending under current law in Urban’s model (5.63). This is done to account for the fact that these savings would now apply to a much greater portion of health care spending than currently proposed policies that only affect the current Medicare program, and because CBO estimates of Medicare reforms do not include the premium and/or cost sharing savings that
beneficiaries accrue. We note that if these savings estimates were adjusted to reflect payment rates now being set at 110% of current Medicare rates for services in hospitals and 100% of current Medicare rates for services provided by physicians and differential utilization of the affected services across the populations covered by different payers, the savings resulting from this policy could increase total federal cost 2-3% above the amount we report in our base analysis. However, because it is difficult to exactly model the effects of increased utilization in inpatient and post-acute care amongst the uninsured, responses to increased reimbursements for the Medicaid population, and the bundling of common inpatient stays not often funded by Medicare (like maternity stays), we adopted the baseline analysis approach.

**Site neutral payment reform**
This reform consists of two components: (1) All hospital-owned physician offices (i.e., hospital outpatient departments or HOPDs) located off-campus would be paid at the physician office rate, according to the physician fee schedule (PFS); (2) On-campus HOPDs would be paid at physician office rates for certain services, such as clinic visits, that could alternatively be provided in freestanding physicians’ offices. Savings estimates come from CBO estimates of the President's FY2020 budget, and are multiplied by 5.63 to extend the policy from current Medicare to the population as a whole.

**Post-acute care reform**
Given strong evidence of Medicare overpayment for post-acute care (PAC) services, this reform would reduce PAC payment rates by the cumulative amount that would arise from four years of reduced Medicare payment updates. The savings estimate comes from CBO estimates of the President's FY2020 budget and are multiplied by 5.63 to extend the policy from current Medicare to the population as a whole. The President's budget policy phases in, but this estimate assumes the full policy is implemented in year 1.

**Bundled payment reform**
This reform would implement bundled payments for episodes consisting of inpatient care and 90 days of PAC. Savings estimates for this reform are drawn from a CBO budget option in 2013, extrapolated forward to the current budget window based on the annual savings as a share of net Medicare benefits in that year. Under the reform scored by CBO, the spending that would be bundled accounts for about one third of gross non-drug outlays in the Medicare FFS program, and bundled payments are set at levels 5 percent lower than Medicare’s projected average payments per episode under current law. Given estimates of large spending differentials on post-acute care in Medicare Advantage compared to traditional Medicare, we model a version of this reform that generates twice the level of savings as the CBO-scored policy option by adjusting the level at which the bundled payments are set as specified in the plan. The 2020 steady state estimate eliminates the phase in of this policy by applying the ratio of annual savings-to-net Medicare benefits at the end of the budget window to 2020 net Medicare benefits estimate.

**Prescription Drug Negotiation**
The Urban Institute estimates that prescription drug prices will drop to the average of Medicare and Medicaid drug prices under the single-payer system modeled in its report. Data from a 2015 CBO report allows us to estimate that net Medicaid drug prices are roughly 50% of Medicare
Therefore, we assume Urban modeled prescription drugs prices within its single-payer system at 25-30% below current Medicare prices. To take a measured approach, we use the larger reduction of 30% below Medicare prices for our analysis. The savings target of 70% below current Medicare prices for brand name drug spending represents an additional 40 percentage point reduction to Medicare prices compared to the Urban analysis, equivalent to $1.7 trillion in additional cost savings over ten years.

In order to evaluate the policy changes necessary to achieve the 70% savings target, we examined the CBO score of H.R. 3. CBO estimates that H.R. 3 would reduce drug spending in Medicare by $369 billion over a ten year window with three of those years being “phase in” and generating no real savings – meaning that the real savings are likely near $700 billion for a full decade with a phased-in policy, just in Medicare Part D. As we explain in the text, based on CBO’s estimate and current Part D spending as a portion of total prescription drug spending and the fact that private insurance payment for drugs is nearly at par with Medicare Part D prices, we believe it will generate significant savings (potentially in the trillions) over a decade when applied to a single-payer system. This is especially true when accounting for the fact that drug prices for the Medicaid program actually increase under Urban’s modeling to 70% of Medicare from their current rate at about 50% of Medicare.

CBO estimates that the first cohort of negotiated drugs would see prices fall by 55% on average. However, this policy applies only to branded drugs, includes a limit on the number of drugs in negotiation, sets the maximum price at 20% above the average international market price in the other six reference countries, and sets a target price at the lowest price in the reference countries that the Secretary must accept. Loosening these constraints in the negotiation mechanism of H.R. 3 and taking stricter approach to negotiation, when taken together with the compulsory licensing and government manufacturing proposals that would continue to enable access to most small molecule drugs in the event of failed negotiation, would strengthen Medicare for All program’s negotiating ability and enable Medicare for All to negotiate significantly deeper discounts and achieve the 70% cost reduction target set in the proposal.

Medicare for All growth rate
From analyzing the Urban Institute’s 2020 NHE spending and the ten-year budget window, we inferred that Urban used a 4.5%-4.7% growth rate of health expenditures under Reform 8. We also infer that Urban assumes a growth rate of 5.0% under current law. To model the effects of a growth rate limit for healthcare spending under Medicare for All that is equal to the projected GDP growth rate, we apply savings from all other policies before calculating the impact of GDP-pegged growth. We first calculated new 2020 NHE by deducting all estimated 2020 savings from the 2020 single-year NHE number estimated by Urban. We then applied the GDP growth rate to this 2020 NHE base to calculate NHE for the 2020-2029 window under the growth rate limit. The difference between projected ten-year NHE under the GDP-pegged growth rate and ten-year NHE with all policies other than the growth rate limit in effect is $1.1 trillion.

Maintenance-of-effort from States and Local Governments
Using the projected spending data in the National Health Expenditure Accounts Table 16, we calculated the total projected health care spending for states and local governments on employee health coverage ($2.7 trillion), Medicaid ($3.3 trillion), and the Children’s Health Insurance Program ($17 billion) for a total of $6.0 trillion in projected spending over ten years. This maintenance-of-effort is held constant as a consistent percentage of overall Medicare for All spending and grows with system cost growth, which we note above will be below current law projected growth. As a result, states will pay less over time than they would under current law.