## RHETORIC AND REALITY THE OBAMACARE **EVALUATION PROJECT:** Access to Care and the Physician Shortage

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## PROIECT DESCRIPTION

President Barack Obama's first term was defined by the battle over, and the passage of, the Patient Protection and Affordable Care Act, the landmark health-reform legislation known popularly as Obamacare. Along the way, Obama, the law's supporters, and independent analysts such as the Congressional Budget Office (CBO) made specific claims or projections about how the law would affect consumers, patients, and businesses.

Now, three years after Obamacare's passage, many key provisions of the legislation are beginning to be implemented. Whether implementation succeeds or fails will be strongly influenced by the reactions of states, providers, insurers, businesses, and consumers to the law's provisions and to the thousands of pages of new health-care regulations.

Rhetoric and Reality is a project of the Manhattan Institute's Center for Medical Progress that is designed to offer an ongoing, objective, and accessible perspective on the law's performance in light of key claims or projections made about it. Our project will examine the law's effect on Americans in five overarching areas: health-care costs, insurance coverage, employment, access to care, and consumer-driven health plans. Additional topics may be added.

Each evaluation will be based on the best available data and will be revised as new or more authoritative data become available. Each evaluation will come with a letter "grade" on the law's performance, using the following scale:

- A = Very strong likelihood that the reforms will achieve their intended goals
- B = Moderate evidence that the reforms will achieve their intended goals but a need for future analysis
- C = Weak evidence that reforms will achieve their intended goals or growing evidence of unintended consequences
- D = Little or no evidence that the reforms will achieve their intended goals and significant evidence of unintended consequences
- F = Undeniable evidence that the reforms will produce effects contrary to their intended goals
- I (Incomplete) = Insufficient evidence to support a final judgment on the effects of the reforms

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# THE OBAMACARE EVALUATION PROJECT: Access to Care and the Physician Shortage

Paul Howard and Yevgeniy Feyman

#### INTRODUCTION

he Obamacare expansion of insurance coverage will, on net, increase the number of individuals with insurance by some 25 million. A little more than half of the newly insured will have insurance from Medicaid (about 13 million), while most others will gain coverage through private insurance purchased on state-run or federally run health-insurance exchanges.

Irrespective of the source of coverage, it is axiomatic that demand for health-care services increases when the formerly uninsured gain coverage.<sup>2</sup> While some of this increased demand may be due to legitimate need (particularly for those with serious preexisting conditions who have been unable to obtain regular access to care because of lack of insurance), many of those who will be covered will be young and relatively healthy (39 percent of the uninsured are between the ages of 18 and 34) or will be those who rate their health as "good" or "excellent" (60 percent of the uninsured).<sup>3</sup> Yet because they will gain (or be required to purchase) expansive coverage that insulates them from significant costs associated with health-care services, their demand for health-care services will increase beyond its optimal level.<sup>4</sup>

This demand is obviously a concern in a nation that already spends 18 percent of its GDP on health care, but it also presents challenges for a health-care system where access to certain services—such as primary care—is significantly strained. It is this last dimension—access to care—that has been given relatively little thought in the popular debates over the Affordable Care Act (aka Obamacare).

Indeed, if seriously or chronically ill patients face increased competition for physicians' attention from the newly insured, it is possible that worsened health and increased costs could be the short-term result of Obamacare's insurance expansion.

The main focus of our analysis is assessing access to primary-care physicians under the health-care law. The reason for this focus is twofold: first, we already know that we will be facing a primary-care shortage in the coming years, so understanding the role that Obamacare plays in affecting the shortage is important; second, much of the law was motivated by the argument that expanding access to inexpensive (or free) preventive care and primary-care physicians would ultimately bend the curve of health-care spending.

Our analysis indicates that population growth, demographic changes, and an expansion of insurance spurred by Obamacare will contribute to a significant shortage in primary-care physicians over the coming decade. We project that by 2025, the United States will experience a shortage of roughly 30,000 primary-care physicians—with about 16.5 percent (4,950 physicians) of this shortage being driven by the expansion of insurance coverage under Obamacare, while the remaining 83.5 percent (25,050 physicians) will be due to population growth, aging, and various demographic shifts.

## AMERICAN HEALTH CARE PRE-OBAMACARE: THE GROWING MISMATCH BETWEEN SUPPLY AND DEMAND

As with any resource, health-care resources can be scarce, and scarcities can also be highly localized. For instance, a primary-care physician can attend to only so many patients in one day; a hospital can admit patients only if it has beds and the necessary staff available, and so on. New York City can have an abundant hospital and physician supply, while rural areas of the state face shortages. All other things being equal, when one person is using scarce health-care resources, those resources are not available to someone else.

There is abundant evidence that the U.S. health-care market faces significant mismatches between the supply and demand for various types of health-care goods and services, largely because of how we have structured the tax code and reimbursement formulas for health care. Indeed, economists have long noted an excess supply of some health-care goods and services (particularly high-tech treatment, diagnostics, and specialist physicians) relative to primary-care physicians and gerontologists (who care for the elderly), due to the structure of such reimbursements.

For instance, relatively low reimbursements for evaluation and management services (E&M) under Medicare's relative-based value system mean that it pays less for physician management of chronic diseases (in physicians' offices) relative to more expensive services such as surgeries, diagnostics, and specialist care. This discourages medical students (who have high debt burdens from medical school) from careers in general practice or internal medicine relative to other, better-reimbursed specialties, such as cardiology.

If expanded insurance under Obamacare will create any deficits in access to care, it will likely be for primary care because existing policies and regulations have already created a widening physiciancare shortage. This is especially problematic, since Obamacare envisions expanded "patient-centered medical homes" coordinating care for patients in the hopes of increasing the efficiency of the overall health-care system. Without significant expansions of primary-care capacity, even the weak cost-control provisions in Obamacare may not bear fruit.

Indeed, even as the population has been aging and growing, residency slots for primary-care physicians have largely reached a plateau, while slots for specialists have been growing. Additionally, the design of health insurance required under Obamacare's insurance provisions—such as no co-pays for many preventive services that get bundled into an annual physical—will also encourage the utilization of many preventive-care services through primary-care physicians, increasing the strain on caregivers who are already stressed by existing care guidelines.

#### Health Insurance Versus Health Care

Before delving into our discussion, we would like to address a misconception in health-policy debates, one that helps to inform the analysis in this report. Perhaps because of the highly politicized debate over America's health-care system, politicians, the general public, and even academics have a tendency to confuse access to health *care* with health *insurance*.

This point is especially relevant when discussing the uninsured population, which, by definition, lacks health insurance. This, however, does not mean that they lack access to health care. Most important, access to care is not binary but has many gradations and points of access. Access to health care is broadly defined by two factors: on the one hand, perceived (or "subjective") health status can lead to higher or lower demand for health-care resources; on the other hand, the supply of health-care providers is a binding, objective limit on the scarcity of these resources.

Being "insured" does not guarantee access, either: many providers refuse to accept Medicaid, for instance, which leads to Medicaid beneficiaries facing longer waits for care or even being unable to see a particular physician. The point is to understand that when we discuss "access to care," we are referring to the ability of individuals to satisfy their medical needs, regardless of insurance status.

In a normal market, when there is an increase in demand for a given product, prices rise and suppliers increase production to meet demand; supply increases and establishes a new equilibrium price.

The supply of health care, however, is heavily regulated at both the state and federal levels and slow to adapt to changes in demand. This creates the potential for serious and prolonged bottlenecks in access to care, whether through longer waiting times in a doctor's office, longer waits for an appointment to see a doctor, or the inability to find a provider willing (or able) to see a patient.

This fundamental distinction has, unfortunately, received little attention in the debate over health-care reform.

## ADDRESSING THE MISMATCH: CUR-RENT INCENTIVES ARE INADEQUATE

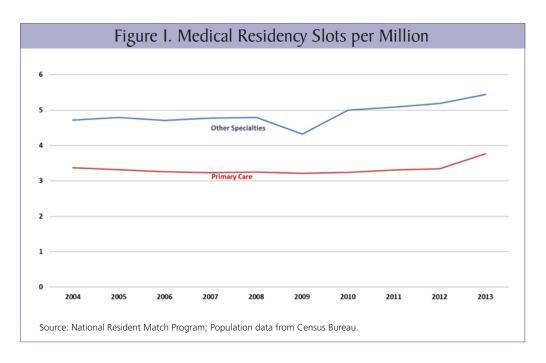
Obamacare offers nominal incentives to increase primary-care supply, including: the Comprehensive Primary Care Initiative; an additional \$1.5 billion in funding for the National Health Services Corps; a reshuffling of unused graduate medical-education residency slots to areas that need them most; and an increase in Medicaid reimbursements to primary-care providers. However, these efforts are unlikely to have a significant impact anytime soon, given the long time lags required for medical education.

The law also fails to enact long-overdue, fundamental changes to payment structures (such as Medicare's Sustainable Growth Rate),<sup>8</sup> to medical malpractice reform, and to increasing primary-care residency slots (which could be partly funded by Medicare). Expanding the supply of primary-care providers could be accomplished through deregulation of state scope-of-practice guidelines (especially for nurse practitioners) and broadened availability

of services through telemedicine initiatives that enhance the productivity of the current physician supply. Addressing these market incentives would help to rebalance supply and demand in the medium to long term. In the near term, physician supply is likely to tighten and waiting times to increase, particularly in markets that are already facing capacity constraints.

## THE DEARTH OF PRIMARY-CARE PHYSICIANS

A shortage of primary-care physicians is nothing new and has been a salient issue in the policy realm for some time. Organizations including the Association of American Medical Colleges (AAMC) have long pointed out that the supply of physicians generally, and primary-care physicians specifically, will be a major problem for the American health-care system going forward. Indeed, politicians have also taken notice: Congresswoman Allyson Schwartz has introduced a bill to expand government-funded graduate



medical slots, noting that "[t]he United States is on the cusp of a crisis in access to both specialty and primary-care physicians" and that "130,000 new physicians will be necessary to eliminate the workforce shortage by 2025." We know that the shortage is real, given that primary-care residency slots for medical school graduates have largely remained flat (save for an increase in the last year), even as the population has been growing and aging.

There are a multitude of reasons for the growing primary-care provider shortage: Medicare's payment structure grossly overvalues specialist services relative to those of primary-care physicians; medical school loans can leave graduates with significant financial burdens, meaning that graduates will pursue the fields that guarantee more money (specialist fields); and federal funding for graduate medicaleducation slots has been frozen since 1997.<sup>11</sup>

Causes aside, important exogenous factors can exacerbate the shortage. Chief among these factors are the size and demographics of the population, as well as the size of the population with health insurance.

Demographic changes as well as population growth affect the demand for health-care resourc-

es in several ways. As the population gets older, for instance, the population generally becomes sicker, with a higher prevalence of chronic diseases and various other ailments, increasing the demand for physician services. Demographic shifts, such as changes in the racial makeup, may also change demand for health-care resources for instance, lower-income, nonwhite minorities are generally thought to be in poorer health than the rest of the country. If this demographic makes up a greater portion of the population over time, it will likely lead to increased demand for health-care resources. The impact of population growth is relatively simple: with more people in the country, the number of people who use medical services increases.

## THE ROLE OF OBAMACARE'S HEALTH-INSURANCE EXPANSION

Beginning in 2014, when Obamacare subsidies and insurance exchanges go into effect, millions of newly insured Americans will enter the health-care system, although the full increase is likely to play out over several years. But what should we make of this expanded insurance coverage?

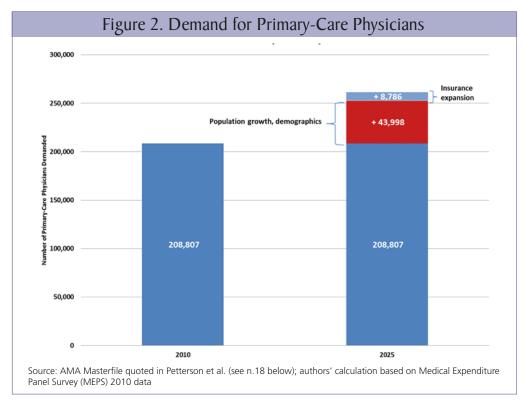
Increased insurance coverage will likely increase the demand for health services—but this certainly is not a simple relationship. For instance, a relatively healthy uninsured person who receives insurance may still not actually use the coverage to see a physician; on the other hand, someone who has been delaying a visit to the doctor *because* of a lack of coverage is very likely to make that appointment once he receives an insurance card. Despite the ambiguities, the overall impact of expanded coverage is "positive"—in the sense that it increases the use of health-care resources. Whether it improves population health is a more complex and debatable proposition, given all the confounding variables.

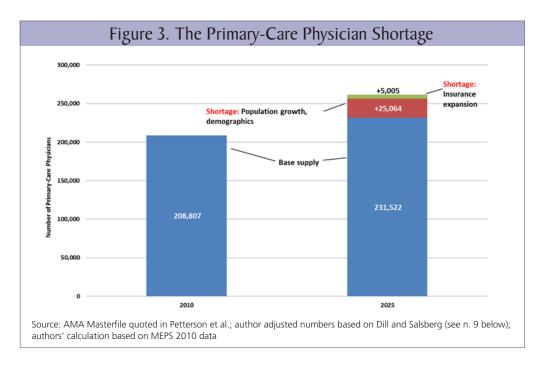
Understanding that population growth along with insurance expansion can affect the demand for primary-care physicians (and health care more generally) helps to disaggregate Obamacare's impact on access to care.

Figure 2 shows that even without Obamacare, population growth and demographic changes will require some 44,000 more primary-care physicians

by 2025. The insurance expansion, as required by Obamacare, will necessitate about 8,800 more physicians to meet increases in demand, all else held equal. It should be noted that many of the people who will receive insurance under Obamacare would receive insurance anyway at some point over the course of the next 12 years (through an employer or through spousal coverage, for instance). Under Obamacare, however, they will receive insurance earlier and will likely use preventive services and primary-care resources earlier. Moreover, Obamacare permanently reduces the annual size of the uninsured population, which necessarily leads to greater utilization of health-care resources.

The increase in demand for primary-care physicians may also vary by the type of insurance. As noted earlier, under Obamacare, there is an expansion of private insurance through the exchanges, as well as through Medicaid, the joint state-federal program that provides insurance coverage for the poor. While it is still unclear how many states will choose to expand the program, roughly half (as of June 14) are indicating that they will do so.<sup>12</sup> Though access to





care in Medicaid is not as robust as under private insurance (driven at least partly by lower reimbursement rates for physician services), a recent study of Wisconsin's Medicaid program noted that "outpatient visits for the study population increased 29 percent, and emergency department visits increased 46 percent." Moreover, results from a randomized trial assessing a Medicaid expansion in Oregon found a 35 percent increase in annual health-care spending and an almost 50 percent increase in annual office visits. 14

For the purposes of our analysis, we assumed that the per-capita intensity of primary-care utilization under Medicaid remains the same going forward. That may change. Medicaid's reimbursement rate for primary-care physicians increases to Medicare rates under the health-reform law for two years, which can increase the number of primary-care visits that the average Medicaid patient makes each year. If it does, the strain on physician supply will be greater than what we project. However, it is unclear whether the increase in reimbursements is sustainable, given other strains on state and federal budgets.

Ultimately, the impact of Obamacare on the primary-care physician shortage, rather than just the

increase in demand for primary-care physicians, is relatively minor: the insurance expansion will require about 5,000 more doctors in 2025, compared with about 25,000 more physicians who will be required because of demographic changes and population growth.

Nevertheless, we will still have a significant shortage of primary-care physicians, which will only worsen over time.

## MOVING FORWARD: OTHER OPTIONS FOR CONFRONTING GAPS IN ACCESS TO CARE

Perhaps the most underappreciated point in the debate surrounding the primary-care physician shortage is that we are guaranteed to have a shortage only under the status quo. That is, by assuming that primary-care physicians are the best vehicle for delivering primary-care services and focusing solely on increasing the supply of physicians, we neglect other potential venues for reform.

For instance, scope-of-practice restrictions (which vary by state) limit who can deliver care and un-

der what conditions. This unnecessarily limits the ability of nonphysician medical professionals (such as nurse practitioners) to provide many of the same services that physicians deliver—but independently, and at lower cost. This has a decidedly negative impact on patients' access to care, especially in areas that already experience a physician shortage. In Arkansas, for example, nurse practitioners "are required to maintain a collaborative agreement with a physician that includes plans for consultation/ referral; protocols for prescribing authority; plans for consultation coverage; and a quality assurance plan."15 It makes little sense to restrict the ability of nurse practitioners to provide care independently of physicians, given that they are trained to do so. Indeed, a 2012 report published by the National Governors Association found that nurse practitioners "provided at least equal quality of care to patients as compared to physicians ... [and] were found to have equal or higher patient satisfaction rates than physicians and also tended to spend more time with patients during clinical visits." 16 Other studies have shown comparable health outcomes between patients who see physicians and those who see nurse practitioners.<sup>17</sup> Expanding scope-of-practice laws would be challenging because of the variation of state laws and entrenched positions of physician groups, but Medicare and HHS can lead the way by designating nurse practitioners as primary-care providers and penalizing states that have particularly onerous scope-of-practice guidelines; retail clinics, often staffed by nurse practitioners, can also be recognized as legitimate sources of care (e.g. when determining network capacity) in plans sold on the insurance exchanges.

Other proposals, directly under Congress's control, would fix Medicare's payment formula, which disproportionately favors specialists over physicians (to his credit, the president's FY 2014 budget includes a mandate for HHS to develop a new physician-fund-

ing formula). Additionally, federal graduate medicaleducation slots have been frozen since 1997; allotting some funds to expanding them (for primary-care specialties) would be a step in the right direction.

If technology permits physicians to become more efficient—for example, by seeing more patients per day without reducing quality of care, through remote consultations; or by answering routine queries by e-mail instead of requiring an office visit—the primary-care physician shortage may be alleviated. Yet there is little incentive for improving efficiency because consumers are largely insulated from the cost of making less efficient choices, encouraging physicians and hospitals to overprovide more expensive care at the margins.

The debate over Obamacare was mainly a debate over insurance coverage and thus failed to engage what were and what remain the most pressing challenges in the U.S. health-care system: the misallocation of resources, the growing wedge between supply and demand, and an impending primary-care physician shortage. Attempts to reform the law should focus carefully on the distinction between access to care and access to insurance and, indeed, on the ways in which the wrong types of insurance encourage bottlenecks in care.

It is clearly unwise to pass landmark health reform without addressing one of the most pressing issues facing the American health-care system, but Obamacare did not create the shortages that we face now and for the foreseeable future. However, it is likely to exacerbate such shortages rather than address them. Because Obamacare failed to do so, on access to care, we give Obamacare a grade of:

C = Weak evidence that reforms will achieve their intended goals or growing evidence of unintended consequences

## **APPENDIX**

### **Data Sources**

To understand how access to health-care resources will change under the new policy, it is necessary to understand how the physician workforce will change. We limit our analysis to the primary-care physician workforce because this is where the biggest shortage is likely to occur, for a variety of reasons discussed in the main body of the report. We use a combination of several data sources to make these projections: for current numbers on primary-care physicians, we looked to the most recent literature; 18 to establish a baseline for the U.S. population, we use the 2010 Medical Expenditure Panel Survey Household Component (MEPS-HC), a nationally representative health-expenditure survey conducted by the Agency for Healthcare Research and Quality; to control for population growth, demographic changes, and population aging, we use the Census Bureau's 2008 National Population Projections; 19 and to understand how the distribution of health insurance will change under Obamacare, we use the Society of Actuaries' March 2013 study looking at the costs of the newly insured under Obamacare. These data sources allow us to control for two of the most important contributors to the usage of health-care resources: population growth and demographic changes; and changes in insurance coverage. Population growth is expected to increase the use of health-care resources, as is the aging of the population (concurrently, aging of the population implies a higher incidence of individuals with worse health status); expanding insurance coverage, as Obamacare does, is projected to do the same.

#### Literature Review

There already exists a significant amount of literature projecting the widely publicized future physician shortage. Two studies were particularly useful for the purposes of our analysis.

The most recent analysis (Petterson et al.)<sup>21</sup> is particularly instructive because the authors break down their results for the growth in physician demand by population growth, aging, and insurance expansion under Obamacare. The results in Petterson et al. closely mirror our own—indeed, we based a good deal of our methodology on what we could glean from the rather opaquely defined methodology briefly described in their work, and we use the adjusted primary-care physician numbers that the authors derive. The reason we use physician numbers from Petterson et al. is because the authors thoroughly adjust for physician retirement, unknown physician specialization, and various other factors that are important to take into account when looking at the total number of practicing primary-care physicians.

In 2008, the American Association of Medical Colleges (AAMC) published a rather comprehensive review of total physician supply and demand projections for 2025.<sup>22</sup> The authors constructed a robust model that estimates full-time equivalent physician needs and projects supply and demand using a variety of sources, including the AMA Masterfile, various medical school surveys, and Census Bureau population projections, as well as several surveys conducted by the Centers for Disease Control and Prevention (CDC). Contrary to Petterson et al., AAMC does not adjust the baseline numbers from the AMA Masterfile, and consequently estimates nearly 260,000 primary-care physicians by 2010; this estimate is 51,000 greater than Petterson et al.'s adjusted estimate of 209,000 in 2010. What we find most useful from AAMC's analysis is that the authors offer an estimate of primary-care physician *supply* in 2025—the unadjusted number they estimate is 272,700. From this, we are able to impute an adjusted number based on a ratio derived from Petterson et al. for 2010.

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## Methodology

The first step in projecting a primary-care physician shortage is to project primary-care physician supply. The primary-care physician supply for 2010 comes from Petterson et al.'s adjusted primary-care physician count—208,807 in 2010. For 2025 supply projections, we take the proportion of Petterson et al.'s adjusted primary-care physician count and divide it by the unadjusted primary-care physician count to obtain an "adjustment proportion." We apply this proportion (84.9 percent in 2010) to the 2025 projected supply from AAMC to estimate that by 2025, there will be 231,522 primary-care physicians.

After understanding how primary-care physician supply will look in 2025, we can begin projecting how demand for primary-care physicians will change over the 15 years we focus on. To do this, we first have to establish a baseline demand. Using data from MEPS, we calculate the total number of primary-care office-based visits that occurred in 2010 for the entire sample—here defined as general practice, family practice, internal medicine, or pediatrics.<sup>23</sup> Based on this definition, there were 437,645,733 visits to primary-care providers in 2010. Assuming that primary-care supply was meeting primary-care demand in 2010, we calculate that the average primary-care physician is able to handle 2,095.93 visits annually (total number of visits divided by the total number of primary-care physicians).

In general, there should be three variables that affect the demand for primary-care physicians (which we proxy as the number of annual primary-care physician visits): the first, and likely most salient, is population growth and demographic changes; the second is insurance coverage; and the third is a relatively vague variable, physician—or broadly, health system—productivity (for instance, greater elasticity of substitution between doctors and nurse practitioners can reduce the number of actual physicians needed to meet primary-care demand). Our modeling takes into account the first two factors, but modeling productivity change is beyond the scope of this report. In the main section of the report, we discuss qualitatively how productivity changes, or how the substitution of physicians with nurse practitioners may affect primary-care demand.

To model changes in primary-care visits in response to population growth and demographic changes, as well as changes in insurance-coverage status, we take advantage of the complex design of MEPS and manipulate the sample person-weights while leaving the stratification of the sample untouched. We first calculate new weights for 2025, based on the Census Bureau's National Population Projections to factor in population growth (including immigration), population aging (the ratio of "younger" to "older" individuals falls), as well as demographic changes (ethnic and racial shifts will take place, for instance, as minorities make up a larger share of the population). We manipulate the weights by creating, based on the census's single-age projections, 16 separate age groups of five-year intervals each, along with two additional age groups for those under five years of age and those 85 years and older, for a total of 18 age groups. We use these age groups, sex, as well as eight ethnic categories—white, black, American Indian, Alaskan Native, Asian, Native Hawaiian, Pacific Islander, and those reporting multiple races—to develop a set of "growth coefficients" for each group. The person sample-weights are then multiplied by these coefficients to obtain a new population baseline for 2025. Implicitly, we assume that patterns of primary-care utilization remain the same with respect to age, sex, and ethnic background (that is, the probability of seeing a physician in any given year remains the same with respect to the aforementioned factors).

Our results indicate that this adds 92,216,617 primary-care office visits relative to 2010—for a total of 529,862,350 primary-care visits in 2025.

To estimate the impact of an insurance expansion, we look to data from the Society of Actuaries' (SOA) study on the cost of the newly insured under Obamacare.<sup>24</sup> As part of its report, the SOA released the results of its modeling efforts in a spreadsheet that was made publicly available. This allows for deeper analysis using its results. Using SOA's estimates on how insurance coverage will change, we further manipulate the 2025 population growth weights: we categorize insurance-coverage status as private, public, or uninsured (as MEPS does); we grow the sample weights to reflect an increase in the number of insured, or we reduce the sample weights to reflect a reduction in the number of uninsured. Because SOA's results do not offer cross-tabulation by sex and race, we modify our sample weights by SOA's six age groups.

The results of our modeling effort indicate that by 2025, the expansion of insurance, as SOA projects will happen under Obamacare, will increase primary-care visits by 18,415,887 (relative to 2025). Altogether, the impacts of insurance expansion and population growth and demographic changes will result in 548,278,237 primary-care visits in 2025. The complete results are summarized below.

Primary-Care Office Visits, 2010–25: Sources of Change				
AGE GROUP	BASE	INSURANCE EXPANSION	POPULATION CHANGE	TOTAL
19 and under	120,358,713	2,128,969	14,568,352	137,056,034
20 to 24	12,200,929	808,973	1,016,088	14,025,990
25 to 34	31,469,394	3,267,136	3,293,203	38,029,733
35 to 44	42,676,231	4,059,674	4,987,740	51,723,645
45 to 54	59,899,076	4,096,806	(4,442,371)	59,553,511
55 and over	171,041,390	4,054,329	72,793,605	247,889,324
Total	437,645,733	18,415,887	92,216,617	548,278,237

The values for the "base" column and "total" column are totals; the "insurance expansion" and "population change" columns are changes (or *deltas*). We report our findings using age groups similar to what the SOA used in its analysis because reporting at the more aggregated level of analysis results is more accurate than attempting to disaggregate the results.

Primary-Care Physician Supply and Demand				
	2010	2025		
Supply	208,807	231,522		
Demand	208,807	261,591		
Source: Petterson et al.; Dill and Salsberg; demand is based on authors' calculations.				

#### **Caveats**

A number of important data and methodological limitations should be taken into account when interpreting our results.

First, we restrict our analysis to the primary-care physician workforce. This excludes any visits to nonphysicians such as nurse practitioners—as such, we do not take into account potential replacement of demand for physicians with demand for nonphysicians.

Second, the impact of insurance on primary-care visits should be interpreted with caution. Obamacare itself likely has a marginal impact over time—that is, as people get older, they are more likely to find a job; and that job is likely to

offer health insurance. This would happen with or without the health-reform law. However, this merely represents "churn" in the context of the uninsured; the actual size of the uninsured population would not change. Obamacare does explicitly change the size of the annual uninsured population each year of implementation: by reducing the size of the uninsured population, Obamacare necessarily increases the utilization of health-care resources relative to a world where Obamacare did not become law. The health-insurance numbers should be interpreted relative to a "steady-state" in 2025—that is, if by 2025, Obamacare would not have been implemented, the full implementation in that year would result in about 18.4 million more primary-care office visits. In that context, the increased utilization that we identify is a "pure" impact of Obamacare's insurance expansion.

Third, our analysis rests on the assumption that in 2010, there is no primary-care shortage or surplus. This is a simplifying assumption: if in 2010, there was indeed a shortage of primary-care resources, our analysis underestimates the future shortage; if there was a surplus, it overestimates. Based on volumes of research, it is likely that a shortage does exist; however, we choose to err on the side of caution.

Fourth, we do not take into account the impact of primary care becoming relatively less expensive. Because Obamacare requires out-of-pocket spending limits, along with no co-pays or deductibles for preventive services, annual checkups and other preventive services will increase. The extent of this increase is difficult to measure, but previous literature, such as the RAND Health Insurance Experiment, indicates that lower cost-sharing tends to result in greater use of health-care resources, without necessarily contributing to better outcomes. For those with 0–25 percent coinsurance, the RAND study showed that the price elasticity of demand for well care (i.e., preventive services) is 0.14, calculated from episodes of care and 0.13 calculated from average coinsurance rates. Thus, each 10 percent reduction in the price of preventive services would be associated with roughly a 1.4 percent increase in demand.<sup>25</sup>

Fifth, and related to the previous caveat, we do not take into account potential declines in productivity as a result of Obamacare. Some observers have suggested that greater hospital consolidation, for instance, as is happening in response to the Accountable Care Organization model, can lead to reductions in physician productivity by 25 percent or more.<sup>26</sup>

Last, we do not attempt to address what is arguably a very important issue when discussing access to care: geographical maldistribution of health-care resources. That is, health-care resources (such as hospitals) are likely not distributed optimally.<sup>27</sup> Recent literature<sup>28</sup> has credited population health differences with geographic variation in Medicare spending, for instance, while researchers at Dartmouth University have explained spending variations with differences in treatment intensity. Regardless of which conclusion is more accurate (the answer is likely somewhere in the middle), geographic maldistribution is without a doubt an important issue. The issue of distribution, however, addresses a different question altogether, which deals with reducing geographical variations in primary-care access.

## **ENDNOTES**

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