WHAT WILL U.S. HOUSEHOLDS PAY FOR HEALTH CARE IN THE FUTURE?

A BUDGET FORECAST FOR AMERICAN FAMILIES

by Matt Blackbourn

PIONEER INSTITUTE
PUBLIC POLICY RESEARCH

White Paper No. 138
December 2015

Pioneer's Mission

Pioneer Institute is an independent, non-partisan, privately funded research organization that seeks to improve the quality of life in Massachusetts through civic discourse and intellectually rigorous, data-driven public policy solutions based on free market principles, individual liberty and responsibility, and the ideal of effective, limited and accountable government.

This paper is a the Center for Health Care Solutions, which seeks to refocus the Massachusetts conversation about health care costs away from government-imposed interventions, toward market-based reforms. Current initiatives include driving public discourse on Medicaid; presenting a strong consumer perspective as the state considers a dramatic overhaul of the health care payment process; and supporting thoughtful tort reforms.

The Center for Better Government seeks limited, accountable government by promoting competitive delivery of public services, elimination of unnecessary regulation, and a focus on core government functions. Current initiatives promote reform of how the state builds, manages, repairs and finances its transportation assets as well as public employee benefit reform.

The Center for School Reform seeks to increase the education options available to parents and students, drive system-wide reform, and ensure accountability in public education. The Center's work builds on Pioneer's legacy as a recognized leader in the charter public school movement, and as a champion of greater academic rigor in Massachusetts' elementary and secondary schools. Current initiatives promote choice and competition, school-based management, and enhanced academic performance in public schools.

The Center for Economic Opportunity seeks to keep Massachusetts competitive by promoting a healthy business climate, transparent regulation, small business creation in urban areas and sound environmental and development policy. Current initiatives promote market reforms to increase the supply of affordable housing, reduce the cost of doing business, and revitalize urban areas.

TABLE OF CONTENTS

Executive Summary

Recently published projections of national health expenditures forewarn of serious financial challenges ahead. A July 30, 2015 report by the Centers for Medicare and Medicaid Services (CMS) projects that federal health spending will grow at an average rate of 5.8 percent annually from 2014-2024.[1] On August 25 2015, the Congressional Budget Office (CBO) released a report projecting that spending on Medicare, Medicaid, the Children's Health Insurance Program and the Affordable Care Act's (ACA) exchange subsidies will increase from 5.2 percent of the country's gross domestic product (GDP) this year to 6 percent of GDP over the next decade.[2] These figures significantly outpace the Federal Reserve's projections for inflation[3]: 1.7 to 1.9 percent for 2016 and then 2 percent beyond 2017.[4]

Publicly-financed health care programs face a difficult road ahead—but, the future outlook for the employer-sponsored health insurance market is equally grim. Lawmakers and employers are especially concerned about the growing burden businesses will face in light of these forecasted trends. In early August 2015, the National Business Group on Health (NBGH) released a survey of 140 of the country's largest companies showing employers expect their health care costs to increase by an average of 6 percent in 2016.[5] Some experts have projected employer health costs will rise to rates as high as 8-9 percent next year.[6]

These projections present an alarming picture for the future fiscal condition of the United States and U.S. businesses—but what do they mean for working American families?

2013-2014 data shows that employer-sponsored health plans covered 57.8 percent of the U.S. population under age 65[7] during this timeframe. In Massachusetts, 58.8 percent of employees are enrolled in employer plans as of last year.[8] As the majority of Americans get their health care through an employer plan, the impact that growing health costs will have on employers will have significant implications for the way most Americans experience their health care in the future.

If U.S. households' share of these health care costs grows by the same rate as total premiums that NGBH predicts, American families stand to face an historic health cost-related fiscal crisis. Assuming 2 percent annual growth in wages, if family premium contributions and out-of-pocket costs rise by 6 percent annually going forward, a household with one parent working 40 hours per week will be paying $7.83 per working hour for health care by 2025 and $14.03 per hour by 2035.[9] Assuming just 4 percent increases in out-of-pocket costs and employee contributions, the average U.S. family will be paying $13,213 a year—a fifth of their household income—towards health care just ten years from now.

Our paper examines this critical and largely unexamined part of the debate surrounding rising health care costs today: the future financial impact on U.S. families.

Background

Health Care: An Increasing Burden on Families

More than any other time in U.S. history, American households are feeling the pressures of growing health care costs. Over the last ten years, the total cost of a typical employer-sponsored health plan for an American family jumped from $11,192 to $23,215—an increase of more than 107 percent.[10] The 2012 National Health Interview Survey found that 1 in 6 families faced financial difficulty paying medical bills over the course of 2012, and 1 in 10 families reported they were unable to pay their medical bills at all.[11] Massachusetts residents face an even larger burden according to recent data. In 2012, over 40 percent of non-elderly adults in Massachusetts reported financial difficulty with health care costs, 37.1 percent reported problems due to health-related spending, and 16.4 percent reported going without health care as a result of prohibitive costs.[12]

As prices have hit new extremes over this time, employers have been transitioning to cost sharing

models designed to make employees responsible for paying a larger proportion of the costs. High Deductible Health Plans (HDHPs), or "Consumer-Driven Health Plans" (CDHPs), have become popular tools in the strategic campaign to incentivize consumers to make more educated and cost-conscious assessments in their health care choices. The goal of this shift in policy is to rein in costs generated through the structural separation that currently exists between patients and providers.

A Pioneer Institute study published in December 2012 found that this type of insurance design presents a number of potential benefits to both employees and employers, including lower employee premium contributions (a range of 11-28 percent less on average) and average savings for employers of $1,500 per employee compared to employers that did not offer a high-deductible option.[13] Though advocates for CDHPs have rightly pointed out that the plans have been very effective in driving down costs, some experts have expressed concerns that the cost-shifting of consumer-driven models can generate damaging outcomes for some patients—an issue we'll revisit later in this paper.

Concerns about cost-sharing solutions are part of a much broader issue: the financial burden of health care costs has increasingly shifted towards employees and their families. A November 2014 report from Aon Hewitt concluded that employees' share of the cost of an employer-sponsored health plan will have increased more than 52 percent from 2010 through 2015, assuming employees will be covering 23.6 percent of the cost of the total premium this year.[14] Revealing similarly grim findings, the Kaiser Family Foundation's 2014 Employer Health Benefits Survey reported that average annual worker contributions for family coverage increased by 81 percent from 2004 to 2014, from $2,661 to $4,823.[15] It is worth noting that annual wage growth has not kept up with this rapid growth of employees' share of total premium payments.

Unfortunately, this growing burden on workers is reflected not just in rising premium contributions, but also in out-of-pocket (OOP) expenses. For example, the average annual deductible for covered employees last year was 108.4 percent more than it was in 2006—a jump from $584 to $1,217 in a span of just 8 years.[16] Overall, employees in 2014 paid an average of $100 more per month towards a combination of rising premium contributions and point-of-care expenses than in 2011.[17]

To what degree can U.S. households expect these costs to increase over time? How much should the typical American family be prepared to budget for their health-related expenses? These are two questions this paper attempts to answer.

This study's central goal is to draw attention to a critical health policy issue that, if not addressed through significant structural changes to the current system, will threaten the livelihood of most American families. To provide readers with an accurate picture of what this future system will look like absent fundamental changes, these projections assume a future health care system that is structurally very similar to what exists today, with minimal adoption of alternative payment and cost saving measures. Our goal was not to model the future impact of comprehensive health reform, but to provide estimates that help illustrate a range of scenarios we could face in the future.

What is the State of the U.S. Health Care System Today?

As it currently stands, the U.S. health care system is in a troubling position: each year, spending continues to rise inexorably without commensurate improvements in delivery of health services. There is currently a very active debate on the position of the U.S. health care system relative to international peers. Some studies have argued that the U.S. spends more on its health care system than any other developed nation yet performance and health care outcomes consistently rank among the worst in the industrialized world.[18] Though the appropriate methodological framework for this comparative analysis is still subject to debate, there is wide consensus that there continue to be

fundamental issues with the efficacy and quality of U.S. health care relative to the high spending in this area.

As health care costs have continued to rise, U.S. lawmaking bodies and government officials have been locked in debate over the appropriate course of action going forward, with focus on the efficacy and long-term viability of the Affordable Care Act (ACA). As recent events confirm, the ACA looks like it is here to stay. This past June, the Supreme Court ruled with a 6-3 majority that the federal government is permitted to establish insurance exchanges and provide tax subsidies to assist low-income Americans in buying health insurance. However, the scope of this reform does not sufficiently address the issues surrounding the growing cost burden on consumers.

A significant part of the cost picture has not been monitored with enough scrutiny or public disclosure by government bodies or research groups: the shifting burden to consumers in the form of employee's share of premium costs and rising OOP expenses. A 2012 study from the Commonwealth Fund, for instance, provides an exhaustive survey of premiums and deductibles by state, noting that premiums for family coverage increased 62 percent in aggregate from 2003 to 2011, and that the cost of deductibles more than doubled for employees in large and small firms during the same period. The study, which offers a number of valuable findings regarding the growing burden on consumers in the health care market, also projects costs of family premiums going out to 2020—though the focus of the study is the cost of total family premiums, not employee contributions plus all forms of OOP costs.[19] In this way, the study provides limited information on future health care costs from the budget perspective of a typical U.S. household.

A White House report from September 2009 also directly addressed the growing hardships of rising insurance premiums on American families, but the focus of the study is narrowed to national and state trends in total premium growth.[20] This offers a limited picture of the burden U.S. households face as a result of rising health care costs. Though the study provides some valuable takeaways, including an assessment of the extreme disparities in premium increases by state and region, there is no detailed analysis of the actual share of health care costs for which U.S. households are and will continue to be responsible.

Our aim is to start an informed discussion by examining available data on a more granular level: potential future employee contributions to family premium plans in addition to OOP costs. In doing so, our goal is to show the consequences of inaction in addressing these troubling trends in health cost inflation as it impacts U.S. households, and the increasingly larger burden consumers can expect to face as a result. In our conclusion, we offer three recommendations for a path forward: (1) establish a more comprehensive and thorough process for analysis of the impact of these trends on the purchasing power and economic livelihood of American families; (2) make providers work aggressively towards making health care service prices more transparent and accessible; (3) change regulations to allow for a more flexible, high-quality and lower-cost consumer-focused health system.

Methodology

Central to the discussion of how rising health care costs impact U.S. families is the continuous rise of annual health insurance premium costs and OOP expenditures for health plan-contributors. In evaluating growth trends in health insurance plans, this paper leaned heavily on a projection model employed in a series of reports published in the medical journal, *Annals of Family Medicine*. In these reports, authors Dr. Richard Young and Dr. Jennifer DeVoe raised concerns about growing health insurance premium costs taking up an increasingly larger percentage of household earnings.

The first report, published in 2005, projected that rising insurance premiums would make health plans cost an amount equivalent to a typical U.S. household's yearly earnings by 2025. This first report did not include projections of employee

contributions to health plans, focusing instead on projections of total health premiums. In 2012, the authors released an updated report that included projections of employee contributions as well as modified projections of total health premiums.

As the authors point out in their update, annual premiums grew by an average of 8 percent from 2000 through 2009, and household income grew by an average of 2.1 percent over this same time. Compare this to 2012 to 2013, when employer-sponsored family health premiums rose 4 percent[21], while U.S. household income rose by 1.8 percent over the same period.[22] In their adjustments, Young and DeVoe also incorporate an analysis of the impact of the PPACA on insurance premium costs. This update included two different models—one which assumes 8 percent annual premium increases, in accordance with trends going back 10 years, and one assuming a "modestly favorable impact" of ACA legislation, projecting a 7 percent annual increase. Running projections based on these two assumptions, the authors present the alarming finding that employee contributions to family plans, when added to OOP expenses, would eat up 50 percent of household income by 2031 and 100 percent of income by 2042.[23] [24]

Our aim with this paper is similar to what Young and DeVoe set out to do: comprehensively assess the future impact of rising health care costs on U.S. households. However, unlike Young and DeVoe's approach, which assumes 7 and 8 percent annual premium contribution growth and 6 percent growth in OOP costs, our aim was to provide a more detailed examination of future projections with a wider range of scenarios. Following their methodological framework, we analyzed three different projection scenarios through the year 2035.

To more clearly illustrate these permutations, we use family names to simplify our description. For each of these families, we offer two separate scenarios based on different projections of 4 percent (scenario A) and 6 percent (scenario B) annual increases in OOP costs:

I) The first family, the "Smiths", will experience the scenario with the highest increases of 8 percent increases in employee contributions to health premiums per year, plus OOP annual increases of 4 percent and 6 percent.

II) Our second family, the "Johnsons", will experience 6 percent annual increases in employee contributions to health premiums per year, plus OOP annual increases of 4 percent and 6 percent.

III) The third family, the "Millers", will experience 4 percent annual increases in employee contributions to health premiums per year, plus OOP annual increases of 4 percent and 6 percent.

These projections are based on the assumption that employee contributions will rise at a rate consistent with the rate at which total premiums will increase. It is worth noting here that recent trends point to the fact that employee contributions to health plans are actually rising at higher rates than total premiums, largely as a result of the growing move towards cost-sharing systems among employers.

Like Young and DeVoe's approach, we also based our projections for OOP costs on data from the most recent Milliman Medical Index (MMI), which includes deductibles, co-payments and all forms of co-insurance. The 2015 MMI report, the source of our OOP data, lists average 2014 OOP expenditures as $4,065 for a family of four.[25] As mentioned above, for OOP expenses we projected based on two different scenarios: 6 percent annual increases, which is the approximate average yearly increase of the period 2009-2014 and the figure that DeVoe and Young used in their study, and a more optimistic projection of 4 percent increases.[26]

For our projections of median household income, we assumed yearly earnings growth of 2 percent applied to data from the Census Bureau.[27] It is important to note that this earnings growth projection is optimistic relative to recent trends—based on data from the Census Bureau, median household income only grew by an average of 1.88 percent per year from 2001 to 2014, the most

recent year for which income data is available. From 2009 through 2014, U.S. household earnings grew by an average of just 1.53 percent each year.

To provide a comprehensive framework for understanding the scope of this issue, we ran separate analyses for two different representative groups of U.S. workers: workers in private sector establishments and civilian employees, which includes private sector and local/state government employees but excludes federal government employees. Using figures from the insurance component of the Medical Expenditures Panel Survey (MEPS)[28] and 2014 income data from the U.S. Census Bureau, our analysis includes the following two components:

1) Projected increases in the average annual private sector employee contribution (in dollars) to a family health care plan plus projected OOP expenses, compared with future household earnings;
2) Projected increases in the average annual civilian employee contribution (in dollars) to a family health care plan plus projected OOP expenses, compared with future household earnings.

As the projected results for both groups were extremely similar, we present our results for the private sector below and offer a separate, more detailed summary for the civilian sector results in the *Appendix*.

Findings

The first results estimate how much money families will be paying to cover their share of total insurance premiums over time. To calculate this, we compared future median household income to average employee contributions plus OOP expenditures.

The Smiths

We first looked at scenario A, which assumes 6 percent annual increases in OOP costs, for the Smith family. For the Smiths, who see 8 percent annual increases in employee contributions to family plans, the cost of health care—strictly defined here as their family's average private sector employee contribution to a health care plan plus total OOP expenditures—will add up to $18,251 by 2025, or 28 percent of their household income that year. In the same scenario, by 2035 they would be paying $36,562—equivalent to a staggering 46 percent of their household income.

In scenario B, which assumes a more optimistic 4 percent increase per year in OOP costs, the Smiths would be paying $16,792 towards health care by 2025. Put differently, in just ten years the Smiths would be allocating almost 26 percent of their budget to health costs in this scenario. By 2035,

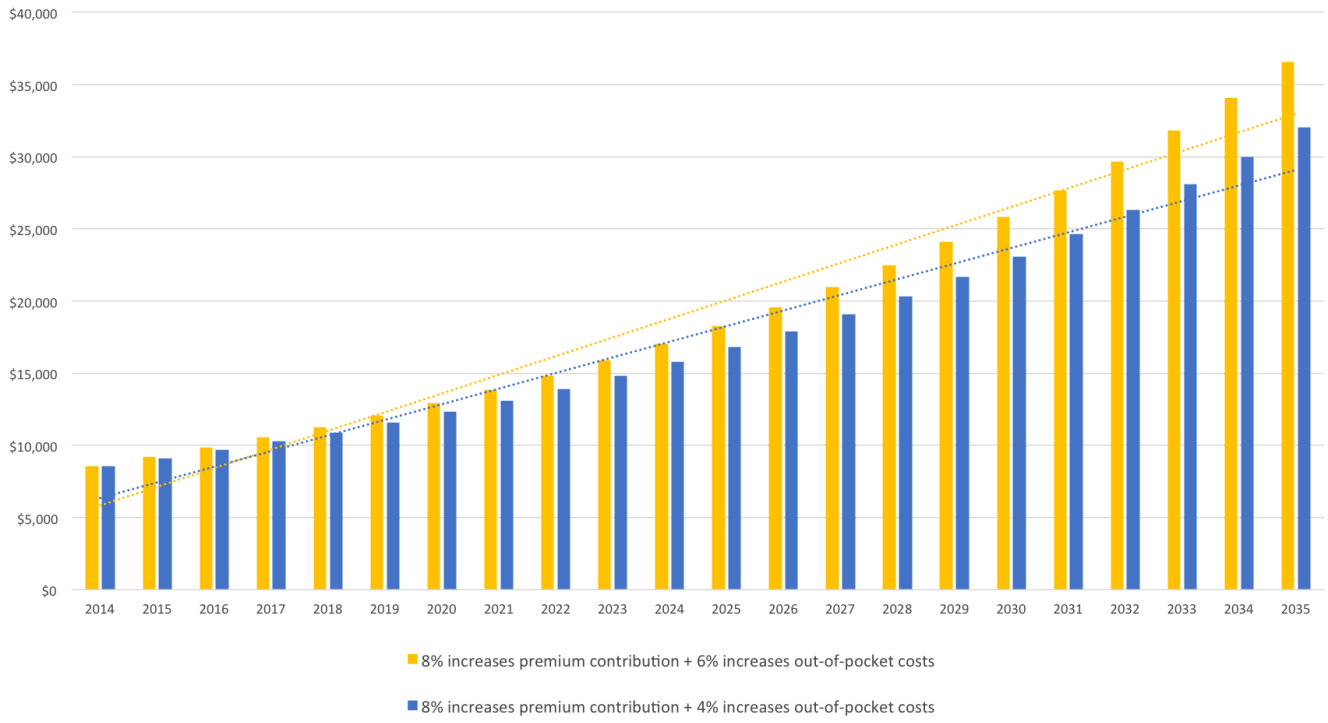
Health care costs over household income: The Smiths (8% annual increases in OOP costs)

Year	2014	2025	2035
Scenario A - 6% annual increases in OOP costs	16.00%	27.36%	44.96%
Scenario B - 4% annual increases in OOP costs	16.00%	25.17%	39.36%

Total annual health care costs: The Smiths

Year	2014	2025	2035
Scenario A - 6% annual increases in OOP costs	$8,583	$18,251	$36,562
Scenario B - 4% annual increases in OOP costs	$8,583	$16,792	$32,006
Median Household Income - 2% annual increases	$53,657	$66,716	$81,326

Family Health Care Costs Over Time: 2014-2035
Smiths (8% Annual Growth in Premium Contributions)



these costs would total $32,006, which would eat up just under 40 percent of the Smiths' household income for that year.

The Johnsons

For the Johnsons, who experience 6 percent annual increases in employee contributions to family premiums in our cost model, the numbers are still alarming. In scenario A, they would be paying just under a fourth of their income towards health care—or, $16,293—by 2025. By 2035 this figure would be $29,178, consuming 36 percent of their household income.

In scenario B, the Johnsons would be paying $14,834 a year towards health care in 2025, dedicating a little over 22 percent of their yearly earnings to this part of their budget just ten years from now. By 2035, their health care costs would total $24,622, or just under 31 percent of household income.

The Millers

The family with the most favorable projections of 4 percent annual increases—the Millers—also faces a bleak fiscal future. In scenario A, their health care costs would add up to $14,627 by 2025. This total would eat up more than 22 percent of the Millers' household income that year. This percentage would climb up to 30 percent of their income by 2035—or, $24,115.

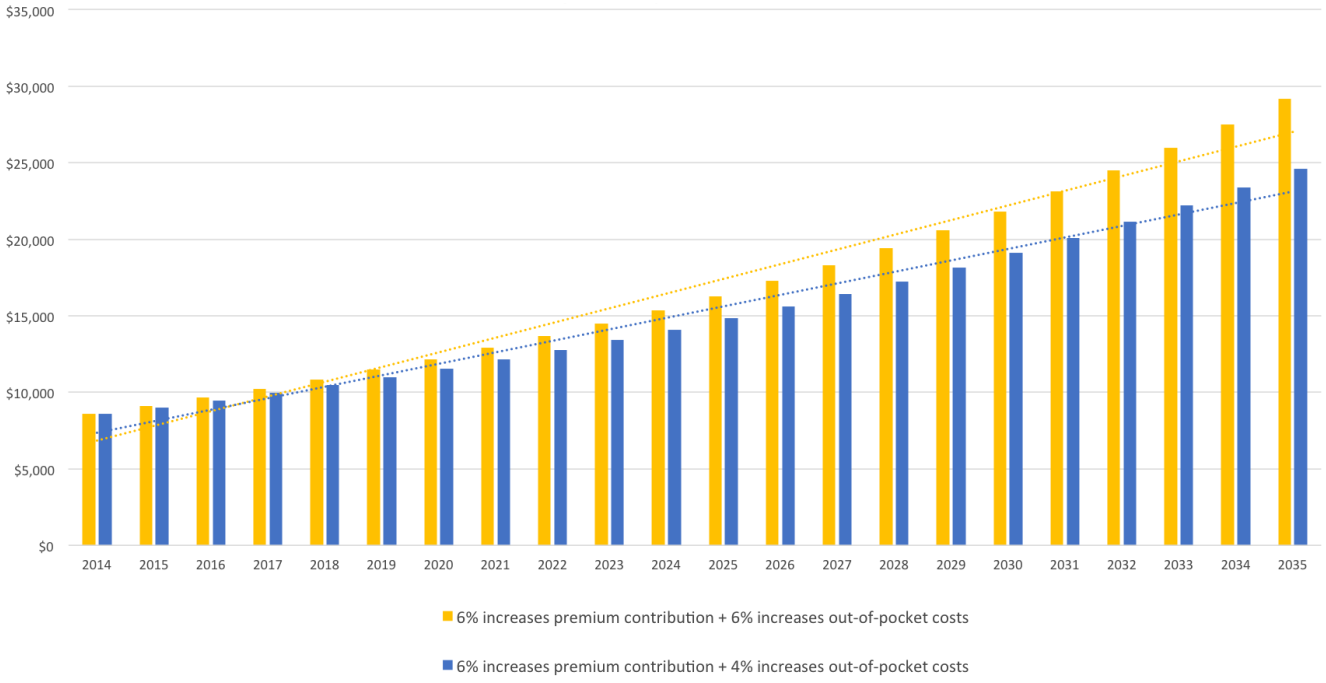
Health care costs over household income: The Johnsons
(6% annual increases in premium contributions)

Year	2014	2025	2035
Scenario A - 6% annual increases in OOP costs	16.00%	24.42%	35.88%
Scenario B - 4% annual increases in OOP costs	16.00%	22.24%	30.28%

Total annual health care costs: The Johnsons

Year	2014	2025	2035
Scenario A - 6% annual increases in OOP costs	$8,583	$16,293	$29,178
Scenario B - 4% annual increases in OOP costs	$8,583	$14,834	$24,622
Median Household Income - 2% annual increases	$53,657	$66,716	$81,326

FAMILY HEALTH CARE COSTS OVER TIME: 2014-2035
JOHNSONS (6% ANNUAL GROWTH IN PREMIUM CONTRIBUTIONS)



In scenario B, the Millers would be spending $13,213 on health costs by 2025, allocating 20 percent of their yearly income to this part of their household budget that year. In this same scenario, their health care costs would total $19,559 by 2035, or 24.4 percent of their household budget.

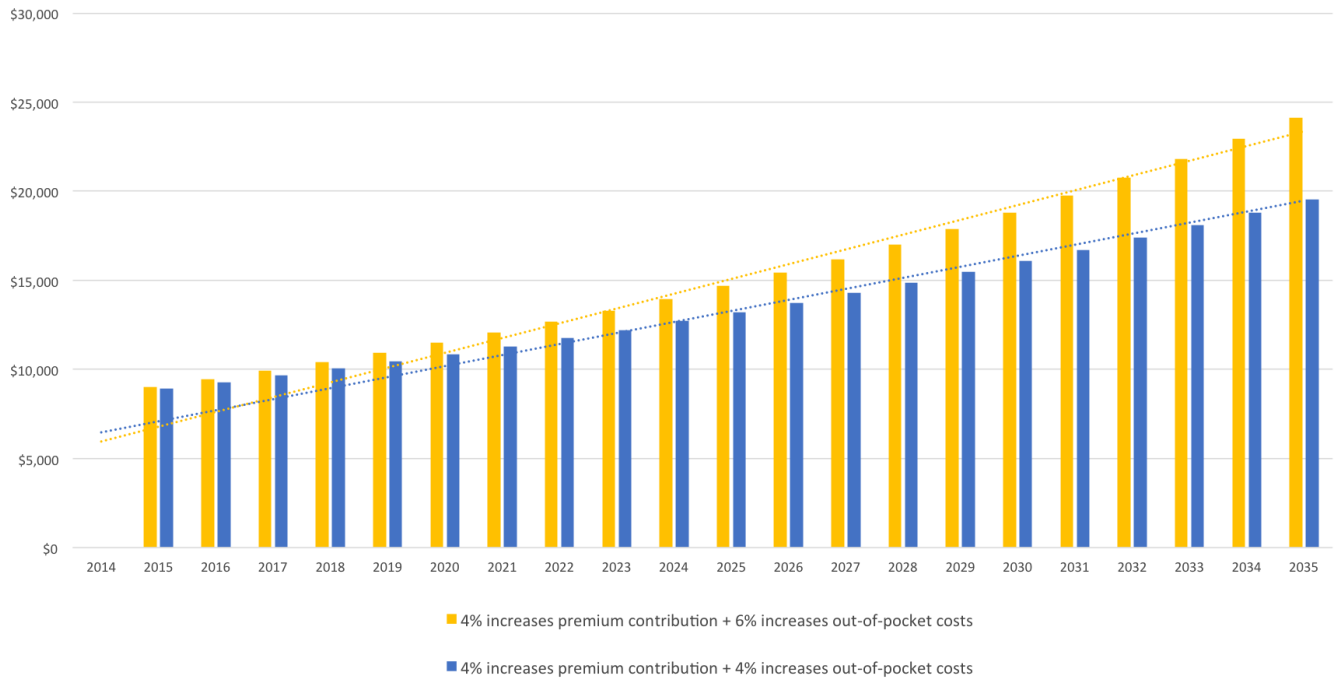
Health care costs over household income: The Millers (4% annual increases in premium contributions)

Year	2014	2025	2035
Scenario A - 6% annual increases in OOP costs	16.00%	21.99%	29.65%
Scenario B - 4% annual increases in OOP costs	16.00%	19.81%	24.05%

Total annual health care costs: The Millers

Year	2014	2025	2035
Scenario A - 6% annual increases in OOP costs	$8,583	$14,672	$24,115
Scenario B - 4% annual increases in OOP costs	$8,583	$13,213	$19,559
Median Household Income - 2% annual increases	$53,657	$66,716	$81,326

FAMILY HEALTH CARE COSTS OVER TIME: 2014-2035
MILLERS (4% ANNUAL GROWTH IN PREMIUM CONTRIBUTIONS)



Discussion

Health care costs took up 16 percent of median household income last year—a number that many Americans would agree is already too much of their earnings. As the above scenarios illustrate, every projection of family premium contributions plus OOP costs shows health care costs adding up to at least 20 percent of household earnings only 10 years from now, but up to as high as 27 percent by that time. According to our projections, this range will be 24 percent at the lowest to 45 percent at the highest by 2035.

The principal takeaway from these findings is that, even in the most optimistic projections of health care cost inflation, U.S. families will be paying an inordinate and unsustainable portion of their annual earnings on health care costs in the future.

Which Scenario is More Likely?

This depends on whom you ask. The 2014 Towers Watson/NBGH Survey found that health costs in 2013 had risen a little over 4 percent from the previous year—a fifteen-year low, but expected to increase to an average of 4.4 percent through 2014.[29] However, this projection is something of a conservative estimate compared to other assessments. The Centers for Medicare & Medicaid Services Office of the Actuary published a report in *Health Affairs* this past January forecasting an average of 5.4 percent annual premium inflation between 2016 and

2023, for example.[30] A June 2014 report from PricewaterhouseCoopers (PwC) Health Research Institute (HRI) projected health cost growth as high as 6.8 percent through 2015.[31] These growth predictions all fall within the range of the three separate scenarios we generated, running projections for 4-8 percent. Nonetheless, these three studies forecast dramatically different cost scenarios.

As mentioned above, U.S. household earnings grew by an average of just 1.53 percent from 2009 through 2013. What if wage growth continues at this same rate? By 2025, median household income for a family of four would be $63,411 a year. The Smiths, who experience 8 percent annual increases in their premium contributions, would be particularly devastated by health care costs. In scenario A, assuming 6 percent annual increases in OOP costs, the Smith family would be paying almost 29 percent of their income towards health care in ten years—by 2035, they'd be paying half of their income in this scenario. In scenario B, which assumes 4 percent annual increases in OOP costs, they'd be paying more than 26 percent of their income towards health care by 2025, and 43 percent by 2035.

Assuming future wage growth commensurate with average increases between 2009-2013, the Johnsons and the Millers would also be faced with an unsustainable cost burden in their health costs. In Scenario A, the Johnsons (6 percent annual increases in premium contributions) would be paying 26 percent of their income towards health costs by 2025 and almost 40 percent by 2035—in Scenario B, these numbers would be 23 and 33 percent respectively. In Scenario A, the Millers (4 percent annual increases in premium contributions) would be paying 27 percent of their income towards health care by 2025, and 33 percent by 2035. In Scenario B, they would be paying 21 percent by 2025 and almost 27 percent by 2035.

Though this projection of annual wage growth should be considered a "worst case scenario", if recent historical trends in wage increases continue going forward, a future resembling what these projections reveal will not be unlikely.

Focusing on the Bay State

Though this study is national in scope, Massachusetts is worth mentioning here for a variety of reasons, including the following: 1) it is a national hub for technological advancement in medicine and is home to some of the country's highest quality hospitals and health services; 2) it offers some of the highest-ranked health insurance carriers in the country; 3) Massachusetts passed a health care reform law in 2006 that laid significant groundwork for national health care reform.

The Commonwealth has the highest premiums for family coverage out of all 50 states, according to 2011 data. The Commonwealth Fund study on premiums and deductibles cited earlier in this paper projected that Massachusetts will continue to have the highest average total premium for employer-sponsored plans through 2020, when the cost of a total plan will be an estimated $27,920, assuming historical average annual rates of increase seen across states from 2003 to 2011 continue.[32]

Though Massachusetts does have a higher median income than most other states, per capita health care spending in the Commonwealth is the highest in the nation—largely a function of trends towards higher prices, more regulations and higher utilization over the last decade. One result of this out-of-control spending is a damaging crowding-out of other budget areas, for both governments and households. Massachusetts households have experienced an especially large fiscal burden: employee contributions for family health plans grew by 7 percent per year from 2005 to 2011, while household income increased by just 1.6 percent annually during this same period.[33] For residents that fall below the median income line, the higher than average premium obligations present especially painful fiscal scenarios.

Conclusion

Recommendations

In light of the enormous growing health cost burden families will face in the future in Massachusetts and beyond, both state and federal government bodies should take additional steps to carefully monitor these future trends. In Massachusetts, the Center for Health Information and Analysis (CHIA) already provides a survey of employer's insurance. But, the legislature and Governor's office should consider a statutory change to expand the role of the agency to include in their analyses more specific data to better connect cost sharing trends with family health care costs and what they can reasonably expect in the near future in light of recent historical trends.

CHIA's employer and insurance surveys offer us a range of valuable metrics that help assess health care affordability: percentage of Massachusetts employers offering HDHPs, employer share of health insurance premiums, as well as data on out-of-pocket spending. But, the budget picture for households is still limited. Lawmakers should consider changing statute to ensure the agency conducts a yearly examination similar to the one performed in this study to determine what share of employer health plans and all OOP expenses MA households will be responsible for in the future. This would include an annual assessment of family premium contributions in addition to OOP expenses relative to Massachusetts median income, with future projections based on historical data going back 5-years. The federal government should also consider incorporating this analysis into the reporting of consumer-focused research groups, like the Agency for Healthcare Research and Quality. The bottom line is that both levels of government should closely watch the trends discussed in this paper and incorporate into their annual publications updates on what consumers can reasonably expect to face in the future.

What actions are employers taking to address these trends? As mentioned earlier, the growing popularity of cost-sharing models reflects a fundamental shift in the way employers are managing exploding costs. A survey in 2012 reported that 59 percent of large employers offered at least one form of consumer-driven plans that year—an enormous jump from just 5 percent in 2003.[34] The same 2014 PwC report mentioned above shows enrollment in high-deductible plans increasing 225 percent from 2009 to 2015.[35]

It is important to note that CDHPs have demonstrated success in health cost containment, especially when offered with a Health Savings Account (HSA) or Health Reimbursement Account (HRA): two similar categories of accounts that allow tax-deductible contributions and tax-free withdrawals for qualifying medical expenses to mitigate the burden of OOP costs. A 2012 research brief from the RAND Corporation found that the U.S. could reduce annual health care costs by $57 billion if half of those covered by employer-sponsored insurance enrolled in a consumer-directed plan. The same brief highlights that families who transitioned to a CDHP spent an average of 21 percent less on medical costs over the first year of enrollment compared to families staying on traditional plans.[36] It is clear that the structure of consumer-driven plans is a promising source of cost savings in the health insurance market.

In spite of the proven savings, a critical concern about the shift towards cost-sharing arrangements in the employer insurance market is that this trend will put an even larger financial burden on U.S. households who already must dedicate a significant portion of their income to both rising premiums and growing OOP costs.

While employers are right to move in a direction that incentivizes employees to be more cost-conscious consumers in their medical-related purchase decisions, it is important to consider all potential outcomes of this health care delivery model. One prominent criticism is that consumer-driven models create among patients disincentives to seek health care services. In other words, the concern is that consumer-driven care will encourage patients to skip necessary medical procedures and consultations due to higher costs.

An Economic Policy Institute brief from May 2013 found that shifting costs to consumers could expose them to a higher risk of financial shocks and might lead to overall higher costs due to reductions in the consumption of preventive care and other forms of necessary medical interventions. The study also concludes that most cost shifting measures are "poorly targeted" in that they neglect the true source of rising costs and contain costs solely through reducing quantity of health care consumed and not reducing the actual price of services.[37] If CDHPs continue to be used as a leading option for cost containment in health care, lawmakers must be mindful of these concerns to ensure consumers do not face overwhelming financial difficulty.

A more fundamental criticism of CDHC is that its effectiveness is predicated on the assumption of a transparent health care marketplace, where price and quality data are easily available. Critics contend that the marketplace as it currently exists does not provide sufficient information on the prices of different health service options. Consequently, they purport that this lack of transparency makes it impossible for consumers to perform an effective cost-benefit analysis and make economically efficient decisions in their purchasing choices.

This problem is exacerbated by the enormous variation in the pricing of medical services and procedures. The regional price disparities between common procedures are extreme, and more often than not the price of health care delivery is not tied to the actual quality of the service. A report from Blue Cross and Blue Shield (BCBS) earlier this year assessed pricing of knee and hip replacement surgeries in 64 markets across the U.S. and found that the cost of these procedures can vary by as much as 313 percent, depending on location.[38]

To ensure patients can make reasonable purchasing selections, it is imperative that providers establish transparent systems that offer consumers a convenient means of accessing the price of medical services.

Massachusetts was an early national leader on this front. In 2012, the Commonwealth passed a law mandating that providers disclose the prices of medical services and procedures to consumers. Effective starting January 2014, hospitals and clinics are legally required to provide consumers within two business days a so-called "allowed amount"—the sum of money insurance companies agree to pay the provider in exchange for health services. The implementation of this legislation, however, has not had enough impact.

A recent Pioneer study surveyed 23 hospitals and 10 free-standing clinics in the Commonwealth requesting price information for an MRI scan for a left knee. The results showed that virtually all providers contacted lack an effective system of price transparency. In addition, many of the providers insisted on following antiquated protocols that create hurdles for consumers that violate the terms of the 2012 legislation. Clearly, there is much more work to be done to ensure consumers have access to price information. As the paper recommends, providers should improve their procedures for handling price info requests, update their training requirements to ensure every request is managed in accordance with Massachusetts law and implement a plan to make all pricing available electronically via hospital websites.[39] Other states should follow Massachusetts' example by introducing similar legislation and collaborating with provider networks to ensure the enforcement of more transparent practices.

We also recommend that states establish a regulatory framework that is more patient-oriented and allows for more flexibility in our health system. Specifically, policymakers should loosen restrictions on alternative delivery options that benefit consumers—principally, convenience care clinics (also referred to as "limited service clinics"), which offer lower-cost health services for walk-in patients at smaller retail-based clinics. Expansion of this clinical model could generate significant cost savings through reducing unnecessary emergency department (ED) visits, increasing access to preventive services such as immunizations and providing low-cost primary

care for populations with limited coverage. The impact of increased access will be critical given the projected shortage of primary care physicians in the future. An estimated fifteen million more Americans will be eligible for Medicaid by 2025, and upwards of thirty million new patients will enter the U.S. health care system over this time due to the Affordable Care Act (ACA). To keep up with the ensuing increase in demand for health care services over the next ten years, the U.S. will need almost 52,000 additional primary care doctors. Convenience clinics could be a valuable instrument to address this surge in patient demand.

In conjunction with this regulation reform, lawmakers should make changes to scope of practice laws to ensure that medical professionals can practice 'at the top of their license'—or, provide any treatment or care that is within the scope of their training. Relaxing these restrictions would give patients a greater level of choice in "shopping" for a practitioner and would generate more competitiveness among providers, helping to drive down the price of health services.

Our concluding recommendations build on the argument for greater transparency and provide specific targets for regulation reform to make the Massachusetts system more patient-oriented and consumer-focused:

- The Commonwealth should build on the reforms of the 2012 transparency legislation by giving consumers the "right to shop", providing patients the opportunity to seek out cost estimates from out-of-network providers for better deals and be rewarded if they find a better deal.
- Government officials should work aggressively to reform Determination of Need (DON) regulations, which place artificial restrictions on the range and variety of treatments and locations available to consumers, producing negative outcomes in health care delivery and driving up prices.[40]

Appendix

The trajectories for civilian employee contributions to family premiums are just as dire as projections for private sector families.[41] If the Smiths were in the civilian sector, they would be paying over 27 percent of their total median income towards health care by 2025, and over 44 percent by 2035, assuming 6 percent growth in OOP expenses. If we assume 4 percent increases in OOP costs each year, the Smiths would see their health expenses eat up 25 percent of their budget just ten years from now, and 39 percent by 2035.

For the Johnsons, family health care costs will add up to $16,061 by 2025—or, approximately 24 percent of household earnings, based on the assumption of 6 percent growth in OOP costs. Extending the timeframe to 2035 shows this percentage reaching over 35 percent in 2035 ($28,763/year). Projecting for 4 percent increases in OOP costs, this scenario shows the Johnsons paying just over $14,600 per year on premium contributions and OOP payments by 2025—just shy of 22 percent of median household income by that time. This projection shows the Johnson's health care costs reaching an amount equal to 30 percent of household earnings by 2035: $24,207.

The Millers' health cost burden will hit $14,356 by 2025 and $23,647 by 2035, assuming OOP costs grow by 6 percent annually. Put differently, our most favorable projection for civilian families shows that their health costs will be equivalent to 21.5 percent of household income by 2025, and over 29 percent by 2035. If OOP expenses increase by 4 percent yearly, these figures will be 19.33 and 23.47 percent, respectively.

Terms and Definitions

Health reimbursement arrangement (HRA): An arrangement where the employer agrees to reimburse health expenses up to a set amount per year for an employee. While often associated with a high deductible health plan, this is not a requirement. Only the employer can fund a HRA. Unused funds can be carried over to the following year.

Health savings account (HSA): A trust account owned by the employee for the purpose of paying for medical expenses not covered by the employer's health plan. The employee must be enrolled in a high deductible health plan that is HSA eligible in order to qualify for a HSA. Both employers and employees can contribute to a HSA. Unused funds are carried over to the following year. HSA eligible health plans have deductible minimums and out-of-pocket limits that are indexed for cost- of-living adjustments annually. In 2013, these values were:

- A minimum annual deductible of $1,250 for single coverage and $2,500 for family coverage.
- An annual out-of-pocket limit that does not exceed $6,250 for single and $12,500 for family coverage.
- With the exception of preventive care, the annual deductible must be met before the plan benefits are paid.

Premium: Agreed upon fees paid for coverage of medical benefits for a defined benefit period. Premiums can be paid by employers, unions, employees, or split between the insured individual and the plan sponsor. All premium amounts in the MEPS-IC tables are shown on an annualized (yearly) basis.

Employee contribution: The portion of the total health insurance premium paid by the enrolled employee. Depending on the cost sharing arrangement instituted by the employer, the employee may contribute nothing to the premium, pay part of the premium, or pay the entire premium. All employee contributions are

shown on an annualized basis in the MEPS-IC tables. The zero contributions are included in the calculation of averages.

Deductible: A fixed dollar amount during the benefit period - usually a year - that an insured person pays before the insurer starts to make payments for covered medical services. Plans may have both per individual and family deductibles. Some plans may have separate deductibles for specific services. For example, a plan may have a hospitalization deductible per admission. Deductibles may differ if services are received from an approved provider or if received from providers not on the approved list.

Copayment: A form of medical cost sharing in a health insurance plan that requires an insured person to pay a fixed dollar amount when a medical service is received, regardless of the total charge for service. The insurer is responsible for the rest of the reimbursement. There may be separate copayments for different services. For example, an enrollee may pay a $25 copay for each doctor's office visit, $150 for each day in the hospital, and $20 for each prescription. Some plans require that a deductible first be met for some specific services before a copayment applies.

Coinsurance: A form of medical cost sharing in a health insurance plan that requires an insured person to pay a stated percentage of medical expenses after the deductible amount, if any, was paid. Once any deductible amount and coinsurance are paid, the insurer is responsible for the rest of the reimbursement for covered benefits up to allowed charges: the individual could also be responsible for any charges in excess of what the insurer determines to be "usual, customary and reasonable". Coinsurance rates may differ if services are received from an approved provider (i.e., a provider with whom the insurer has a contract or an agreement specifying payment levels and other contract requirements) or if received by providers not on the approved list. In addition to overall coinsurance rates, rates may also differ for different types of services.

Private sector: All economic activity other than that of government. In the MEPS-IC survey, the private sector excludes the unincorporated, self-employed with no employees. However, the self-employed with employees and the incorporated, self- employed with no employees are included.

- For profit, incorporated: A private sector firm that is granted a charter recognizing it as a separate legal entity having its own privileges and liabilities, separate from those of its members.
- For profit, unincorporated: A private sector firm with a sole owner or a partnership where two or more persons join to carry on a trade or business with each having a shared financial interest in the business. The MEPS-IC survey does not include unincorporated, self-employed sole owners with no employees.
- Nonprofit: A private sector firm that does not distribute surplus funds to its owners or shareholders, but instead uses surplus funds to help pursue its goals. Most nonprofits are exempt from taxes.

State and local governments (Public sector): The public sector is the portion of the economy consisting of various levels of government. The MEPS-IC survey only collects public sector data from State and local governments. The Federal government (including the postal system and the military) are not included in the MEPS-IC. Where possible, the term State and local government is used instead of public sector as it more accurately describes the coverage of the MEPS-IC survey.

Civilian: A combination of both private sector and State and local governments

About the Author

Matt Blackbourn is Pioneer's Research & Operations Associate. Matt manages Pioneer's Better Government Competition outreach effort, and its internship program. He is also involved with the Institute's government transparency initiative and assists with research for the Center for Better Government. Matt holds a Bachelor of Arts in Political Science and Philosophy from Tulane University, where he was elected to Phi Beta Kappa and graduated *summa cum laude*.

About Pioneer

Pioneer Institute is an independent, non-partisan, privately funded research organization that seeks to change the intellectual climate in the Commonwealth by supporting scholarship that challenges the "conventional wisdom" on Massachusetts public policy issues.

Recent Publications

Driving Critical Reforms at DCF: Ideas for a Direction Forward in Massachusetts' Child and Family Services, White Paper, November 2015

How PARCC's False Rigor Stunts the Academic Growth of All Students, White Paper, October 2015

Bay State Specialists and Dentists Get Mixed Reviews on Price Transparency, White Paper, August 2015

Modeling Urban Scholarship Vouchers in Massachusetts, White Paper, July 2015

Federal Overreach and Common Core, White Paper, July 2015

The Pacheco Law Has Cost the MBTA More than $450 Million, White Paper, July 2015

Mass Hospitals Weak on Price Transparency, Policy Brief, June 2015

Endnotes

1. Centers for Medicare & Medicaid Services. National Health Expenditure Projections 2014-2024. July 2014. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html
2. Congressional Budget Office. An Update to the Budget and Economic Outlook: 2015 to 2025. August 2015. https://www.cbo.gov/publication/50724
3. The Federal Reserve's inflation projections are based on percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated and provide rates of change in the price index for personal consumption expenditures.
4. The Federal Reserve. Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents. March 2015. http://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20150318.pdf
5. Emerman, E. U.S. Employers Changing Health Benefit Plans to Control Rising Costs, Comply with ACA, National Business Group on Health Survey Finds. August 2015. https://www.businessgrouphealth.org/pressroom/pressRelease.cfm?ID=234
6. Livingston, S. Health care premiums rise, more increases coming. August 2015. http://www.businessinsurance.com/article/20150826/NEWS03/150829885/health-care-premiums-rise-more-increases-coming
7. Vitsnes, J, David, K, Miller, E. Statistical Brief #477: Results from the 2014 MEPS-IC Private-Sector National Tables. Medical Expenditure Panel Survey. June 2015. http://meps.ahrq.gov/mepsweb/data_files/publications/st477/stat477.pdf
8. Center for Health Information and Analysis. Findings from the 2014 Massachusetts Health Insurance Survey. May 2015. http://chiamass.gov/assets/docs/r/pubs/15/MHIS-Report.pdf.
9. This hourly rate assumes a 2080-hour work year.
10. Engdahl-Johnson, J, Mayne L. 2014 Milliman Medical Index. 2014. http://www.milliman.com/uploadedFiles/insight/Periodicals/mmi/pdfs/2014-mmi.pdf
11. Cohen, RA, Kirzinger, WK. Financial Burden of Medical Care: A Family Perspective. January 2014. http://www.cdc.gov/nchs/data/databriefs/db142.htm
12. Long, SK, Nordahl, K, Seifert, R. Coverage and Access Remain Strong, But Costs are Still a Concern: Summary of the 2012 Massachusetts Health Reform Survey. March 2014. http://www.bluecrossmafoundation.org/sites/default/files/download/publication/MHRS_Summary.pdf
13. Lischko, A. Consumer Driven Health Care: A New Agenda for Cost Control in Massachusetts. December, 2012. http://pioneerinstitute.org/featured/consumer-driven-health-care-a-proven-strategy-for-managing-health-care-cost-growth/.
14. Aon Hewitt. Aon Hewitt Analysis Shows Upward Trend in U.S. Health Care Cost Increases. November, 2014. http://ir.aon.com/about-aon/investor-relations/investor-news/news-release-details/2014/Aon-Hewitt-Analysis-Shows-Upward-Trend-in-US-Health-Care-Cost-Increases/default.aspx.
15. The Kaiser Family Foundation and Health Research & Educational Trust. Employer Health Benefits: 2014 Annual Survey. https://kaiserfamilyfoundation.files.wordpress.com/2014/09/8625-employer-health-benefits-2014-annual-survey6.pdf
16. The Kaiser Family Foundation and Health Research & Educational Trust. Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 2006-2014: Summary of Findings. http://kff.org/report-section/ehbs-2014-summary-of-findings/.
17. Towers Watson and the National Business Group on Health. The New Health Care Imperative: Driving Performance, Connecting to Value. 19th National Business Group on Health Employer Survey on Purchasing Value in Health Care, May 2014. http://www.towerswatson.com/en-US/Insights/IC-Types/Survey-Research-Results/2014/05/full-report-towers-watson-nbgh-2013-2014-employer-survey-on-purchasing-value-in-health-care

18. Davis, K, Stremikis, K, Squires, D, Schoen, C. Mirror, Mirror on the Wall, 2014 Update: How the U.S. Health Care System Compares Internationally. June 2014. http://www.commonwealthfund.org/publications/fund-reports/2014/jun/mirror-mirror.
19. Schoen, C, Lippa, J, Collins, S, Radley, S. State Trends in Premiums and Deductibles, 2003-2011: Eroding Protection and Rising Costs Underscore Need for Action. December 2012. http://www.commonwealthfund.org/~/media/Files/News/News%20Releases/2012/Dec/1648_Schoen_state_trends_premiums_deductibles_2003_2011_1210_EMBARGO.pdf.
20. The Executive Office of the President. The Burden of Health Insurance Premium Increases on American Families. September, 2009. https://www.whitehouse.gov/assets/documents/Health_Insurance_Premium_Report.pdf.
21. The Kaiser Family Foundation and Health Research & Educational Trust. 2013 Employer Health Benefits Survey. August, 2013. http://kff.org/report-section/ehbs-2013-section-1/.
22. U.S. Census Bureau. Median Household Income by State: 1984 to 2013. Table H-8. http://www.census.gov/hhes/www/income/data/historical/household/
23. Young, R, DeVoe, J. *Who Will Have Health Insurance in the Future? An Updated Projection*. March/April, 2012. http://www.annfammed.org/content/10/2/156.full.pdf+html.
24. Though the focus of this paper is employee contributions + OOP costs, Young & DeVoe offer numerous findings based on analysis of total family premiums vs. future household income. According to their updated study, a family health insurance premium would be equivalent to the average U.S. household's yearly earnings by 2033 at annual increases of 8 percent, with a delay of only 4 years assuming moderate impact by the ACA (7 percent growth per year) in slowing insurance premium inflation.
25. Engdahl-Johnson J. Mayne L. 2015 Milliman Medical Index. 2015. http://www.milliman.com/uploadedFiles/insight/Periodicals/mmi/2015-MMI.pdf
26. The Affordable Care Act does establish an out-of-pocket maximum per policy period, including deductibles, coinsurnace, and copayments. The OOP limit for any individual Marketplace plan for 2015 is $13,200 for a family plan—a figure our projections do not surpass until 2035, at which point it can be reasonably assume this limited will be adjusted for inflation.
27. The Census Bureau defines this income as earnings "received on a regular basis (exclusive of certain money receipts such as capital gains) before payments for personal income taxes, social security, union dues, Medicare deductions, etc."
28. Our projections for employee premium contributions are based on 2014 data from the national-level Insurance Component of MEPS. As the MEPS website describes, this component "fields questionnaires to private and public sector employers to collect data on the number and types of private health insurance plans offered, benefits associated with these plans, annual premiums, annual contributions by employers and employees, eligibility requirements, and employer characteristics."
29. Towers Watson and the National Business Group on Health. The New Health Care Imperative: Driving Performance, Connecting to Value. 19th National Business Group on Health Employer Survey on Purchasing Value in Health Care, May 2014. http://www.towerswatson.com/en-US/Insights/IC-Types/Survey-Research-Results/2014/05/full-report-towers-watson-nbgh-2013-2014-employer-survey-on-purchasing-value-in-health-care.
30. Hartman, M, Martin, A, Lassman, D, Catlin, A, the National Health Expenditure Accounts Team. National Health Spending in 2013: Growth Slows, Remains in Step With Overall Economy. Health Affairs, January 2015. http://content.healthaffairs.org/content/34/1/150.full.
31. PricewaterhouseCoopers Health Research Institute. Medical Cost Trend: Behind the Numbers, 2015. June 2014. http://pwchealth.com/cgi-local/hregister.cgi/reg/pwc-hri-medical-cost-trend-2015.pdf.
32. Schoen, C, Lippa, J, Collins, S, Radley, S. State Trends in Premiums and Deductibles, 2003-2011: Eroding Protection and Rising Costs Underscore Need for Action. December 2012. http://www.commonwealthfund.org/~/media/Files/News/News%20Releases/2012/Dec/1648_Schoen_state_trends_premiums_deductibles_2003_2011_1210_EMBARGO.pdf.

33. Massachusetts Health Policy Commission. 2013 Cost Trends Report. January 2015. http://www.mass.gov/anf/docs/hpc/2013-cost-trends-report-final.pdf.

34. Haviland, A, McDevitt, R, Marguis, M.S., Sood, N, Buntin, M. Skin in the Game: How Consumer-Directed Plans Affect the Cost and Use of Health Care. Santa Monica, CA: RAND Corporation, 2012. http://www.rand.org/pubs/research_briefs/RB9672.

35. PricewaterhouseCoopers Health Research Institute. Medical Cost Trend: Behind the Numbers, 2015. June 2014. http://pwchealth.com/cgi-local/hregister.cgi/reg/pwc-hri-medical-cost-trend-2015.pdf.

36. Haviland, A, McDevitt, R, Marguis, M.S., Sood, N, Buntin, M. Skin in the Game: How Consumer-Directed Plans Affect the Cost and Use of Health Care. Santa Monica, CA: RAND Corporation, 2012. http://www.rand.org/pubs/research_briefs/RB9672.

37. Gould, E. Increased Health Care Cost Sharing Works As Intended: It burdens patients who need care the most. *Economic Policy Institute*, May 2013. http://www.epi.org/publication/bp358-increased-health-care-cost-sharing-works/.

38. Blue Cross Blue Shield Association and Blue Health Intelligence. A Study of Cost Variations for Knee and Hip Replacement Surgeries in the U.S. January 2015. http://www.bcbs.com/healthofamerica/BCBS_BHI_Report-Jan-_21_Final.pdf.

39. Anthony, B, Haller, S. Mass Hospitals Weak on Price Transparency. June 2015. http://pioneerinstitute.org/healthcare/survey-price-information-difficult-to-obtain-from-massachusetts-hospitals/.

40. For more recommendations to improve health systems flexibility and generate more options for consumers, see Pioneer's *Baker's Dozen* report: http://pioneerinstitute.org/news/bakers-dozen-a-common-sense-healthcare-agenda-for-the-next-governor/

41. These projections for civilian households are based on 2013 data for premium contributions to family plans, the most recent year for which data is available through MEPS. The most recent data for private sector households is from 2014.

PIONEER INSTITUTE
PUBLIC POLICY RESEARCH

185 Devonshire Street, Suite 1101 | Boston, MA 02110 | 617.723.2277
www.pioneerinstitute.org | Facebook.com/PioneerInstitute | Twitter.com/PioneerBoston