



WHAT IS “AFFORDABLE” HEALTH CARE?

A review of concepts to guide policymakers

Although the “affordability” of health care is a common concern, the term is rarely defined. Fundamentally, affordability is a function of income, spending, and judgments about the value of goods and services for their price. This brief considers affordability as an economic concept, as a kitchen-table budget issue for individuals and families, and as a threshold in current policy. It reviews a range of measures that capture the cost burden for individuals and families with different forms of coverage, in different financial circumstances, and with different health concerns.

By any measure, many Americans are experiencing significant problems due to health care costs, whether through high deductibles that discourage them from seeking health care, uninsurance or gaps in insurance benefits, or the less-noticed erosion of wages due to rising health insurance premiums. To transform affordability from an aspirational goal to a policy aim, policymakers will need to consider a number of key issues, including: the cost of care versus the cost of insurance, how to fairly distribute costs, consumers’ most salient affordability concerns, the root causes of financial barriers to care, and the differential impact of various policies on stakeholders.

The affordability of health care is a bipartisan issue and [ongoing concern](#) for most Americans.¹ It is no accident that the short title of the 2010 federal reform law was the *Patient Protection and Affordable Care Act*, signaling the goals of protecting patients from undue financial burden and expanding access to affordable care through broader insurance coverage. There is near unanimity on the goal of affordable health care, but little agreement on how to define and measure affordability, much less how to operationalize a definition into workable policy.

In this brief, we consider health care affordability as an economic concept, as a kitchen-table budget issue for individuals and families, and as a threshold in current policy. We review a range of measures to capture the cost burden for people with different forms of coverage,

in different financial circumstances, and with different health concerns. We look at the impact of the Affordable Care Act (ACA) on measures of affordability, and identify key issues for policymakers to consider as they address health care affordability for individuals and families.

HEALTH CARE “AFFORDABILITY:” OFTEN INVOKED, RARELY DEFINED

Unlike most economic measures, affordability is essentially a sentiment. It involves a qualitative ability and willingness to pay—an interaction of spending, income, and judgments about the value of something relative to its price. But health care differs from other

essential goods in that spending is heavily skewed, and the demand or need varies dramatically from person to person, and over time, as health status changes.

In the current debate about health care affordability in the United States, the distinctions among health care costs, health insurance costs, and out-of-pocket expenses are often blurred. These costs are related: health insurance premiums rise as the cost of care itself rises; premiums often decrease as the required level of out-of-pocket cost-sharing (through deductibles, co-payments, and coinsurance) increases. And yet these costs are very different from each other and are experienced differently, at different times, by individuals and families. Although premiums are paid regardless of the immediate need for health care, the impact of cost-sharing is felt when people seek to use care. While few people could afford to pay for the entire range of health care expenses directly, their willingness to pay for insurance might vary with the level of financial risk they are willing to incur, and the assets they wish to protect. A fundamental precept of insurance is to transform uncertain risk into a predictable premium. But for many people with chronic illness, health insurance is less about protecting against unpredictable risk than about financing the costs of predictably high expenses. These distinctions are important for determining who is vulnerable to an increasing cost burden of care or coverage, where the problems reside, and which policies might make a difference.

ECONOMIC MEASURES OF AFFORDABILITY

Economists have struggled to define affordability in terms that would be useful to policymakers. Although economists think about affordability in many different ways, here we cover three approaches: a normative definition of what a household can afford to pay; a behavioral definition based on what people actually purchase; and a budget-based approach that looks at how much “room in the budget” families have after paying for other necessities.

Any statement about affordability is essentially a statement about opportunity costs, about the value placed on other important goods foregone. Applying this to [health insurance](#), in theory, a household can “afford” to pay for health insurance if it would have enough income left to meet its other socially-defined minimum needs, such as food and shelter.² In practice, this **normative definition** requires both a socially-defined benchmark of what constitutes coverage, and a specification of a minimum amount of income needed for other essential goods.

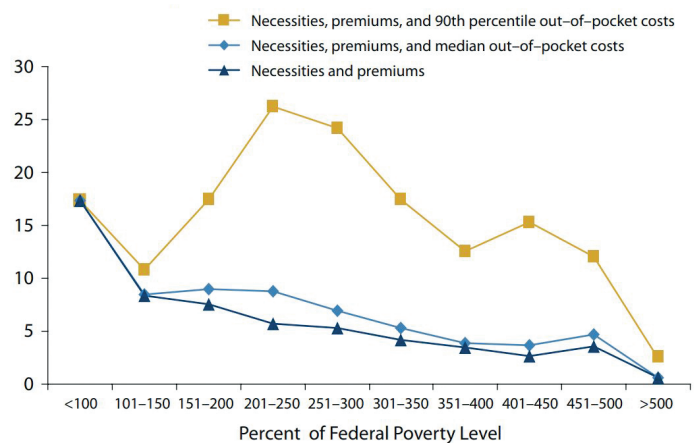
In the era before the ACA, [health economists](#) used this normative definition to respond to the policy question, “are people uninsured because they can’t afford coverage?”³ Their approach was to use a multiple of the federal poverty level (FPL) as a proxy for having enough income for other essential goods. At 300% FPL, they found 28% of the uninsured in 2000 could afford coverage; by the same measure, however, 58% of privately insured adults had purchased coverage that was considered unaffordable. By this definition, affordability did not explain uninsurance.

The same researchers then looked at a simple **behavioral definition**, based on what most people actually purchase. They reasoned that if most people at a given income level, who face similar economic circumstances, obtain adequate insurance, then everyone at that income level can afford coverage. But this definition also failed to explain uninsurance. When they set the affordability threshold at 60% of people purchasing, they estimated that half of the uninsured in 2000 could afford coverage. They note that the two definitions fail to classify the same people as able to afford coverage, and fail to predict whether people actually obtain coverage. But these definitions foreshadow and help us understand the ACA’s combination of an individual mandate targeted at the uninsured who could afford coverage, as well as subsidies targeted to the uninsured who could not afford coverage.

After the passage of the ACA, a Commonwealth Fund [issue brief](#) applied a **budget-based approach** to estimate how the new law would affect affordability of health insurance for those receiving public insurance or purchasing insurance on the individual marketplaces.⁴ Using the Consumer Expenditure Survey (with data on more than 600 categories of household spending), researchers calculated how much room in the budget families had after paying for necessities such as child care, food, housing, taxes, and transportation. They then used the National Medical Expenditure Survey to estimate out-of-pocket costs after accounting for ACA tax credits and cost-sharing subsidies. Health care was considered affordable if a household could pay for estimated annual premiums and out-of-pocket spending without cutting into spending for other necessities. As shown in Exhibit 1, most families above the FPL have room in their budgets for necessities, premiums, and typical levels of out-of-pocket costs.

Exhibit 1. Percent of Households That Do Not Have Room in Budget for Health Care

Percent of households that would lack room in budgets for premiums and median out-of-pocket costs



Jonathan Gruber and Ian Perry, [Realizing Health Reform’s Potential: Will the Affordable Care Act Make Health Insurance Affordable?](#) (Commonwealth Fund, April 2011)

The story is different for people with the highest level (top 10%) of out-of-pocket costs, where about one-quarter of families with incomes at two to three times the poverty level do not have room in their budget for the expenses they face. This analysis concludes:

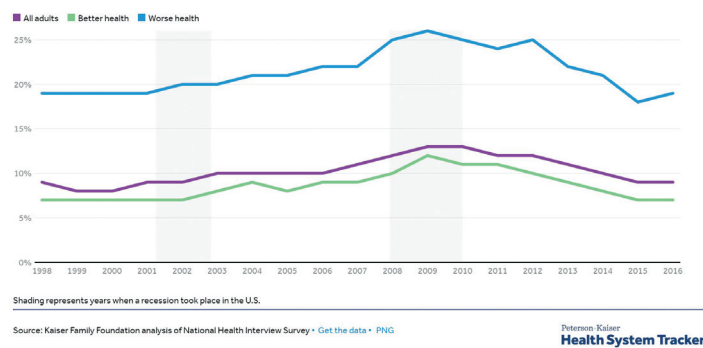
[T]he major risk to affordability under the Affordable Care Act comes not from (after-subsidy) premium payments, but from exposure to high out-of-pocket costs. The bill's premium subsidies appear sufficient for the vast majority of households to allow them to afford their necessary consumption. But the out-of-pocket cost protections, in the form of the cost-sharing subsidies that the government provides to low-income groups or the out-of-pocket limits facing those above three times the poverty level, leave some groups more vulnerable.

A KITCHEN-TABLE VIEW OF AFFORDABILITY

For most individuals and families, health care affordability concerns are not conceptual or normative; they are expressed as cost barriers to needed care, delayed or skipped care, or high levels of medical debt. An [analysis](#) of the National Health Insurance Survey found that levels of cost-related delayed or skipped care have decreased since 2010, as the nation emerged from an economic downturn.⁵ Not surprisingly, adults in worse health report much higher levels of these affordability concerns than healthier people (Exhibit 2).

Exhibit 2. Adults in Worse Health Are More Likely Than Others to Have Difficulty Accessing Medical Care Due to Costs, But Rates Have Declined in Recent Years

Percent of adults who report delaying and/or going without medical care due to costs, 1998-2016



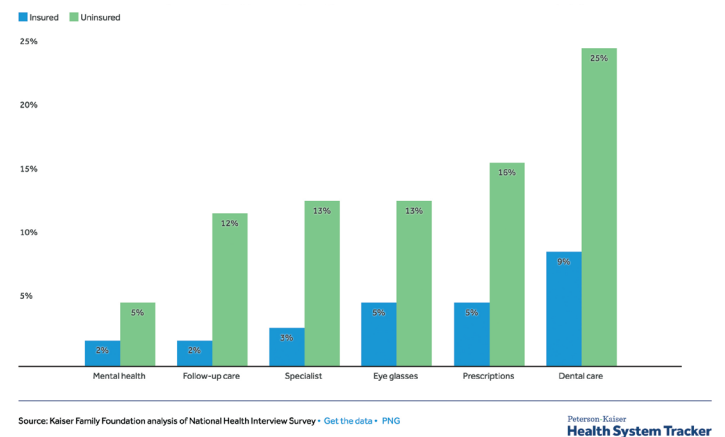
Cynthia Cox and Bradley Sawyer, [How does cost affect access to care?](#) (Kaiser Family Foundation, January 2018)

While uninsured people report the highest level of these concerns, insured people are also vulnerable. Ideally, health insurance improves access to health care services and protects against catastrophic financial losses associated with illness. However, insurance can be [inadequate](#) in terms of the benefits provided, the out-of-pocket costs required, or by the subjective interpretation of whether coverage

protects a family from undue financial burdens.⁶ The design of the benefits package—especially for services that are often omitted, such as dental care and eyeglasses—has a large effect on the levels of delayed or skipped care (Exhibit 3).

Exhibit 3. Adults in Worse Health Report Much Higher Rates of Delayed or Forgone Medical Care Due to Cost

Percent of adults who report delaying and/or going without medical care due to costs, by type of care, 2016

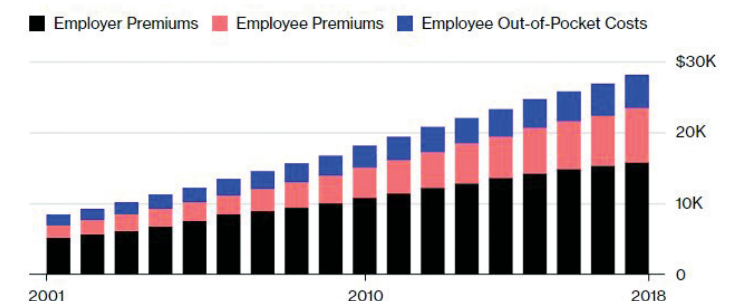


Cynthia Cox and Bradley Sawyer, [How does cost affect access to care?](#) (Kaiser Family Foundation, January 2018)

Much of the recent public debate on health care affordability has focused on premium and deductible increases on the individual market. However, about 56% of all non-elderly people in the United States are covered by employer-sponsored insurance (ESI). As shown in Exhibit 4, health care costs in ESI have continued to climb. Although employers pay the bulk of premiums, the employee share of premiums and out-of-pocket costs is rising. For example, from 2006 to 2016, the average [deductibles](#) in large employer plans increased from \$303 to more than \$1,200.⁷

Exhibit 4. Health Costs Climb

The rising cost of health care is pushing companies to take action



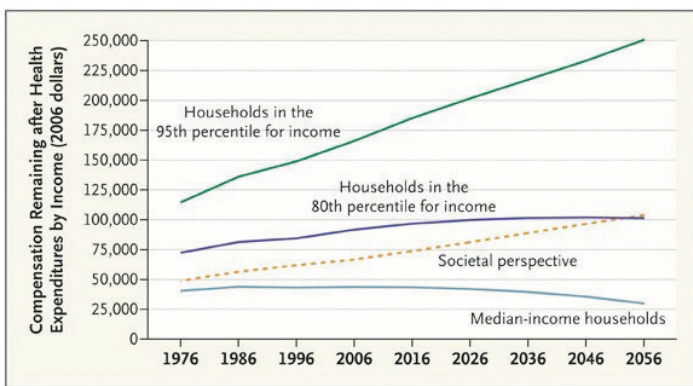
Source: Milliman Medical Index of costs for a family of four in a PPO plan.

Zachary Tracer, [Health Insurance Startups Bet It's Time for a Nineties Revival](#) (Bloomberg, July 2018).

Affordability concerns in ESI take two forms: direct employee costs, both in terms of premium contributions and cost-sharing at the time of care, and indirect costs in terms of foregone wages. Most economists agree that the burden of the employer contribution to ESI is borne by the employee through lower cash wages, and that the federal tax exclusion for ESI, under which employer-paid health insurance premiums are exempt from federal income and payroll taxes, encourages this substitution of health insurance for wages. This is a fundamental health care affordability issue, although it may not be as salient to families as premiums and cost-sharing.

But this perspective highlights the indirect but very real impact that rising health care expenses have on the total compensation earned by working families. Prior to the ACA, [researchers projected](#), based on historical trends, how health care spending would gradually erode a household's remaining compensation after accounting for average premiums, foregone wages from employer contributions to insurance, estimated taxes paid for public programs, and average out-of-pocket costs.⁹ As illustrated in Exhibit 5, these projections show how slow wage growth, combined with a larger share of personal budgets taken up by health care, could leave little compensation remaining for median-income families. Households at the 80th percentile for income would also see a gradual erosion in their remaining compensation, even as a societal perspective indicates that the nation, as a whole, could absorb health care cost growth without reductions in standards of living.

Exhibit 5. Compensation Remaining after Health Care Expenditures for U.S. Households with Various Income Levels

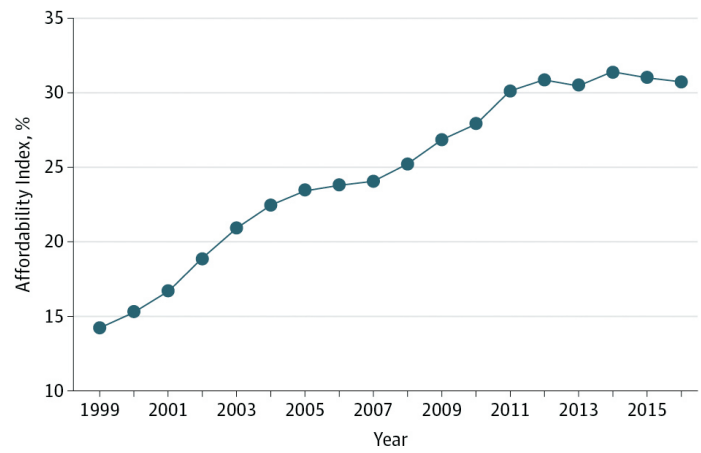


Daniel Polsky and David Grande, *The Burden of Health Care Costs for Working Families – Implications for Reform* (NEJM, July 2009)

More recently, some experts have developed an “[affordability index](#)” as a streamlined measure of the burden that ESI premiums impose on household income, both in any particular year and over time.⁹ The index divides the average total cost for ESI (both employee and employer contributions) by median household income in a given year.

From 2007 to 2016, median incomes increased 18%, from \$50,233 to \$59,039, while average total premiums increased 55%, from \$12,106 to \$18,764. Thus, average insurance premiums increased from 24% of median income in 2007 to nearly 31% of median income in 2017. While the index does not attempt to describe nor define affordability, it does provide a simple way to capture trends in the cost burden of health insurance for working families (Exhibit 6).

Exhibit 6. Family Health Insurance Premiums as a Percentage of Median Income, 1999 to 2016



Ezekiel Emanuel et al., *Measuring the Burden of Health Care Costs on US Families* (JAMA, November 2017)

In addition to rising premiums and stagnating wages, the growth of high-deductible health plans (HDHPs) has contributed to affordability concerns. In 2017, by IRS definition, an HDHP had a deductible of at least \$1,300 for individual coverage and \$2,600 for family coverage. The percentage of workers aged 18-64 enrolled in employer-sponsored HDHPs [rose](#) from 15% in 2007 to 43% in 2017.¹⁰ These plans tend to have lower premiums than non-HDHP plans (with [average family premiums](#) of \$18,054 vs. \$20,035 in 2018), but because deductibles must be paid up front, they can create financial barriers to care.¹¹ It is well known that individuals facing high deductibles use [less health care](#) than others, reducing their use of both appropriate and inappropriate care.¹² An [analysis](#) of the National Medical Expenditure Survey from 2011-2014 found that individuals in HDHPs were nearly 50% more likely to report delaying or skipping needed care due to cost than those not in HDHPs.¹³

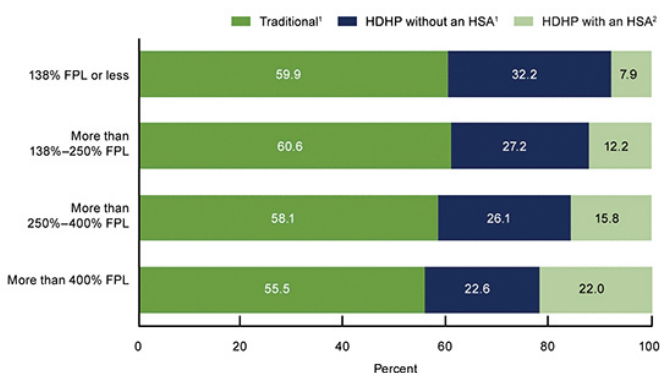
To address the concern that high deductibles will reduce access to needed care, HDHPs can be paired with a tax-advantaged Health Savings Account (HSA) in which employees contribute a share of pre-tax income that can be used to cover out-of-pocket medical expenses (see Factbox).¹⁰

FACTBOX: HDHPs, HSAs, & HRAs

The use of HDHPs with an HSA has been growing over time. The National Center for Health Statistics [found](#) that in 2017, workers with incomes more than 400% of poverty level were more likely to be enrolled in an HDHP with an HSA than their less affluent counterparts; conversely, workers with incomes less than 138% of the FPL were more likely to be enrolled in HDHPs without HSAs (Exhibit 7).

Another option is to pair an HDHP with a Health Reimbursement Account (HRA), in which an employer sets aside a certain non-taxable amount to be used for an employee's medical expenses. Unlike HSAs, employers maintain ownership and control over these funds.

Exhibit 7. Percent Distribution of Adults Aged 18–64 with Employment-Based Coverage, by Family Income and Type of Private Coverage: United States, 2017



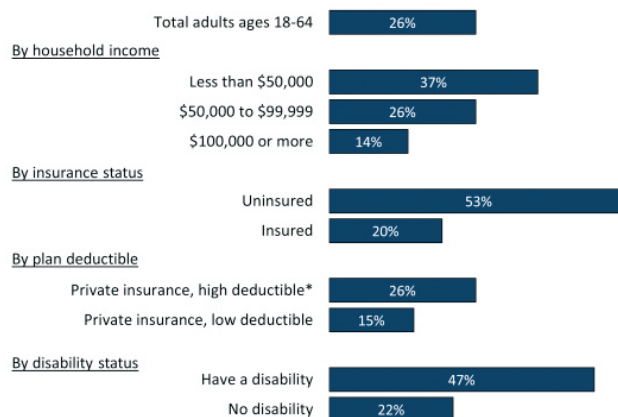
Source: NCHS, National Health Interview Survey, 2017

Robin A. Cohen and Emily P. Zammitti, [High-deductible Health Plan Enrollment Among Adults Aged 18–64 With Employment-based Insurance Coverage](#) (National Center for Health Statistics, August 2018)

A kitchen-table view of affordability must also consider the prevalence of high medical bills and medical debt and the fiscal strain that many families face. According to a 2015 Kaiser Family Foundation [survey](#), about 26% of adults ages 18–64 say they or someone in their household had problems paying, or could not pay, medical bills in the past 12 months.¹⁴ More than half of all uninsured people report these difficulties, but substantial percentages of insured people have them as well: about 19% of people with ESI, 18% with Medicaid, and 22% with individual market coverage. People in higher deductible plans were more likely to report trouble paying medical bills than those in plans with lower deductibles. Lower income people are at higher risk of struggling to pay medical bills, as are people with disabilities (Exhibit 8).

Exhibit 8. Shares of U.S. Adults Reporting Problems Paying Medical Bills in Past Year

Percent who say they or someone in their household had problems paying medical bills in the past 12 months



*High deductibles defined as \$1,500 and above for an individual or \$3,000 and above for a family.
SOURCE: Kaiser Family Foundation/New York Times Medical Bills Survey (conducted August 28–September 28, 2015)

Liz Hamel et al., [The Burden of Medical Debt: Results from the Kaiser Family Foundation/New York Times Medical Bills Survey](#) (Kaiser Family Foundation, January 2016)

POLICY THRESHOLDS OF AFFORDABILITY IN THE ACA

Prior to the passage of the ACA, [researchers surveyed](#) a nationally representative sample of households about the affordability of health insurance.¹⁵ Most respondents felt that households should be expected to pay about 5% of income for health insurance coverage, regardless of income. Respondents considered older households less able to afford coverage than younger households, and households with sicker occupants less able to afford health care than households with healthy occupants. These public perceptions of what households should pay for health insurance stand in stark contrast to what they actually pay, and likely to what they would be willing to pay for coverage if needed. This conflict is often an unspoken driver of contentious policy debates that emerged during the passage of the ACA and continue to this day, in terms of what is considered affordable coverage and how much families should be expected to pay for health care.

The ACA provides concrete thresholds for the most visible health-related costs. For the purposes of the employer mandate and individual marketplace subsidies, the ACA defined employer-sponsored insurance as affordable if the employee contribution for individual coverage was no more than 9.5% of household income. However, the regulations considered only the contribution for individual coverage in determining whether employer-sponsored insurance was affordable for the entire family, leaving many people in the “family glitch” (see Factbox).¹⁶

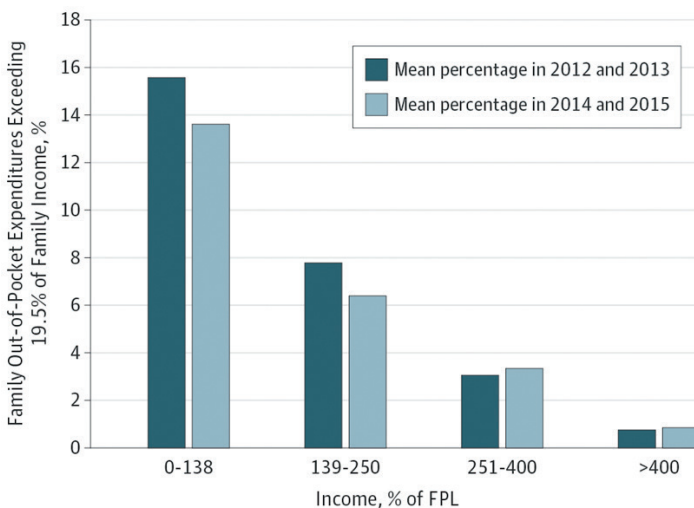
FACTBOX: THE FAMILY GLITCH

An estimated six million people are in the “family glitch,” where individual coverage is deemed affordable but family coverage is not, and because of the offer of employer-sponsored insurance, they are not eligible for premium subsidies on the individual market. A 2016 [analysis](#) that modeled the effects of the “family glitch” found that those stuck in the glitch faced premiums that could amount to nearly 16% of pre-tax income.

The ACA also set an indexed limit for out-of-pocket costs of \$6,500 per individual and \$13,000 per family for covered services, with cost-sharing reduction subsidies for individuals under 250% FPL. Although these thresholds were necessary to delineate the parameters of the new policy, they do not measure the overall financial burden to households, nor do they consider whether these costs are affordable for families across the income distribution. Because the employee contribution and out-of-pocket maximums are indexed to inflation, both thresholds [will increase](#) in 2019: the employee contribution for individual coverage will be no more than 9.86% of household income, while out-of-pocket limits will be \$7,900 for an individual and \$15,800 for a family.¹⁷

After implementation of the ACA, [researchers used](#) the National Medical Expenditure Survey to examine how total household spending on health care (including premiums and household out-of-pocket expenses) had changed among adults age 18-64.¹⁸ Likely due to increased Medicaid coverage and premium subsidies, total household health spending decreased by 16% in the lowest income

Exhibit 9. Income-Related Disparities in the Prevalence of High-Burden Total Health Spending Before and After Implementation of the Affordable Care Act (ACA)



Anna Goldman et al., [Out-of-Pocket Spending and Premium Contributions After Implementation of the Affordable Care Act](#) (JAMA Internal Medicine, March 2018)

group, but did not change overall in the population. As one proxy for affordability concerns, the researchers measured the level of “high-burden total health spending” on families with differing incomes. Somewhat arbitrarily, they defined “high-burden” as health spending exceeding 19.5% of family income, a level that combines a threshold of 10% of family income towards out-of-pocket costs (a widely used measure of underinsurance) with a 9.5% premium threshold (reflecting the ACA’s limit on employee contributions for affordable employer-sponsored insurance). A significant percentage of low-income families still spend more than 19.5% of family income on health care. The prevalence of high-burden spending before and after the ACA is shown in Exhibit 9.

KEY ISSUES TO CONSIDER

This brief has outlined how health care affordability can be understood and measured as an economic concept, a salient issue for individuals and families, and a policy threshold. Affordability is a construct, and not synonymous with high or low costs. It must be understood as a function of opportunity costs—the value of alternative uses for spending on health care (for example, on other necessities). By any measure, many Americans are experiencing significant problems due to health care costs, whether through high deductibles that discourage them from seeking health care, uninsurance or gaps in insurance benefits, or the less-noticed erosion of wages due to higher health care premiums.

When designing policies to alleviate these problems, policymakers must recognize and weigh potential tradeoffs. At the individual level, in some cases it might be possible to lower premiums by offering a plan with less coverage. From a system-wide perspective, making health care more affordable for an individual does not automatically lower the cost to other stakeholders. Costs rarely evaporate; rather, they shift. Depending on the policy, costs can shift from the sick to the relatively healthy, or from individual households to all taxpayers. At a most basic level, any discussion of affordability brings with it value judgements about what we, as a society, see as adequate coverage, and what “room in the budget” different people should have for other things after health care is paid for.

To transform affordability from an aspirational goal to a policy aim, policymakers will need to address the dimensions discussed in this brief, and consider a number of key issues outlined below. For instance, policymakers must consider whether the goal of a particular policy is to shift the cost burden to different stakeholders, or to fundamentally address financial barriers to care by promoting behavior change among consumers, medical professionals, or institutions to lower total costs. They must also consider whether policies aim to address the cost of care, the cost of coverage, or both. And above all, policymakers should ensure that any policies aimed at addressing health care costs reflect consumers’ most salient affordability concerns.

Cost of care versus cost of insurance

Although the cost of health care and the cost of health insurance are related, they are not synonymous. Policymakers who want to address the affordability of health insurance may consider policies such as expanding Medicaid (if they have not already done so), extending tax credits on the health insurance exchanges beyond 400% FPL, or using [reinsurance programs](#) to bring down premiums.¹⁹ The cost of care itself is a tougher nut to crack, because it likely requires major shifts in supply-side policies that foster competitive markets and exert downward pressure on prices, such as value-based payments and narrow networks of providers. But policymakers who want to address the cost burden to families at the point of care could consider policies that make HSAs more valuable to lower-income people, or creative uses of HRAs (funded by employers or public entities).

Fairly distributing costs

Health care spending, and the cost burden of health care, are not distributed evenly across the population. While affordability concerns are not limited to families with lower incomes or greater health needs, they are particularly acute for poorer and sicker people. In terms of opportunity costs, most notions of affordability imply that families should not have to forego basic necessities to pay for health care. Thus, policymakers should consider how cost burdens are distributed across socioeconomic strata and health status, and how policy changes might affect that distribution. For example, premium subsidies distribute costs differently, depending on whether they are inversely correlated with income (as in the ACA), correlated with income (as are the tax benefits of employer-sponsored insurance), or structured as a fixed amount given to everyone (as in voucher proposals).

Consumers' most salient affordability concerns

Policies to address affordability should reflect an understanding of the most salient costs that give rise to public concern. Which of those costs, if any, are significant enough that they prevent consumers from accessing what most Americans would consider adequate health care? Policymakers should consider both the level and timing of out-of-pocket expenses for care. For example, deductibles may be particularly salient because they require a lot of money going out before any coverage kicks in, often posing an immediate challenge in household budgets; conversely, copayments (flat dollar amounts) or coinsurance (set percentages of costs) allow the burden to be spread over time, even if the total annual level and limits of cost-sharing are the same.

Addressing the root causes of financial barriers to care

In the public debate, financial barriers to care are often referred to as problems of affordability. But financial barriers have different causes, and potentially, different solutions. Financial barriers can exist because temporary or longstanding income constraints do not allow people access to basic minimums of both health care and other important goods; they can also exist because of poor financial planning or a reflection of how people value certain services for the price. Policymakers can ask themselves whether a proposal will primarily help those families that are foregoing health care due to income constraints, or whether it will primarily help those who should have sufficient income to meet their health care needs, but choose to spend their money elsewhere. HSAs, for example, could help with the latter but not the former.

Considering the differential impact on stakeholders

As policymakers at the local, state, and federal level consider targeted interventions to lessen the burden of health care costs, it is important to keep in mind how costs are felt by different stakeholders. For working families, growth in overall health care costs can mean rising premiums, stagnant wages, and less income available for other priorities. For individuals, rising out-of-pocket costs can dissuade the use of all services, both high-value and low-value, and undercut the perceived value of insurance itself. For many individuals with chronic conditions, health care spending is literally a lifeline to needed care, and rising costs threaten not only their budget, but their health as well. Tradeoffs are inevitable—between the breadth and depth of coverage, between cash wages and compensation in the form of health insurance, and between spending on health care and spending on other important goods. Policymakers should consider how a policy will affect or shift costs across stakeholders, paying particular attention to reducing financial barriers to care for those with the greatest health needs and least resources.

This issue brief was authored by Janet Weiner and Aaron Glickman at Penn LDI, with input from Kristin Wikelius and Megan Garratt-Reed (United States of Care), and Rebecka Rosenquist and Megan McCarthy-Alfano (Penn LDI). It was produced as part of a research partnership between United States of Care and Penn LDI, and we thank collaborators from both organizations for their valuable review and feedback.

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