Reforming reform: public assessments of the affordability of health insurance policies

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Abstract

Background: Republicans have moved rapidly to repeal the Affordable Care Act, replacing progressive elements of the plan with regressive elements. We draw on an earlier affordability exercise to evaluate how Americans might view these elements of health care reform.

Methods: Immediately prior to passage of the ACA, we conducted a telephone survey of a representative sample of U.S. households. Respondents were presented vignettes representing different insurance plans, each held by people with differing life characteristics. Respondents were then asked to assess the affordability of the presented plans given the characteristics of the policyholders.

Results: Respondents felt that households should be expected to pay about 5% of income for health insurance coverage, irrespective of their income. They also tended to view older households as less able to afford coverage than younger households, and households with sicker occupants as less able to afford healthcare than households with healthy occupants. Results did not differ between respondents in red states and those in blue states.

Conclusions: Most Americans, including those who reside in red states, believe that subsidies for health insurance premiums should be based on a fixed percentage of household income, not a fixed dollar amount. These perceptions may make it challenging to replace the ACA with a less costly alternative plan.

Introduction

The Affordable Care Act (ACA, P.L. 111-148) has reduced the number of uninsured Americans by some 23 million since 2010, through changes in insurance market regulations, the expansion of Medicaid for very low income people, and the introduction of a system of health insurance tax credits in the new health insurance marketplaces^{1,2}. In the 2017 open enrollment period, about 13 million people purchased insurance policies in these health insurance marketplaces. Most people who purchased coverage in the marketplaces were lower-income purchasers who benefited from premium tax credits.

Congress is now debating whether or not to repeal the ACA. Several replacement programs were put forward, including the Empowering Patients First Act (Price),³ and the Patient Choice, Affordability, and Empowerment Act (Burr, Hatch, and Upton).⁴ The plan currently under consideration—“Ryancare”—is an amalgamation and would offer a fixed tax credit for all households that does not vary with income.

While there is debate about whether to include means testing for higher-income households or to provide higher credits for older Americans, the final plan will instead transfer benefits from poorer households to wealthier households and from households in poor health to those in much better health.

This raises questions about whether coverage under the newly proposed plan will be seen as affordable by the very people that it was meant to help⁵. In prior research conducted in 2009, we examined the views of experts on the affordability of health insurance.⁶ These experts, who represented a wide range of political views, were run through a series of formalized exercises in an attempt to ensure that they were all “on the same page” about what affordability meant. Nevertheless, at the end of the exercise, there

was a very large range in price for what these experts felt would be an “affordable” health insurance plan. There was consensus, however, that the share of income Americans could afford to pay for health insurance rose with income, and that households could afford to pay more for a plan with more generous out-of-pocket protections.

At the same time, we also conducted a representative national household telephone survey in which respondents were asked to quantify plan affordability based upon 61 vignettes. The purpose of that household survey was to assess Americans’ perceptions of the affordability of various health insurance policy premiums for different sociodemographic groups. Our survey concluded just as the law passed and we did not publish our findings at that time.

Ironically, we are now at a moment in history when these findings are not only more relevant than they were then, legislation is moving too fast to publish them in a traditional health policy journal. This is why we have chosen SocRxiv to release our findings. We welcome any peer review or comments sent to pm124@columbia.edu.

Affordability and public policy

Affordability is generally judged relative to a household’s socially acceptable standard of living, but there is no general consensus about how such a standard should be determined.⁷⁻¹⁰ For example, factors such as the local cost of living, household debt, age, and earning potential may be relevant in setting an affordability standard. However, these criteria are rarely used when assessing the affordability of publicly supported goods and services (such as welfare or food stamps). Instead, affordability standards set by government panels are typically based only on a household’s economic position relative to

the Federal Poverty Level (FPL). This measure only considers income and family size.¹¹ Because affordability is a standard based on cultural norms, it is also likely to vary for people with differing political viewpoints, incomes, education, and health.

More critically, voters' culturally-patterned perceptions of what is affordable and what is not matters more for the viability of a proposed health program than standard metrics such as household income and family size. This is what we set out to measure in 2009.

Methods

The 61 vignettes that we created describe the living situations of various fictitious households. In each vignette, the characteristics of the hypothetical households were varied. Sources of variation included age, household income, marital status, presence of children, health conditions, the presence of debt or savings, and housing costs. Where children were present in vignette households, the vignettes always specified that they would receive free coverage through the State Children's Health Insurance (SCHIP) program.

Respondents were asked to assess how much each household could afford to pay per month for health insurance. Two different health insurance plans were used in conjunction with the vignettes. The first plan (A) had a \$2,000 annual deductible, 15% cost sharing, and a \$3000 out-of-pocket maximum. The second plan (B) had no deductible, a \$20 office visit co-pay, and a \$50 hospital co-pay with a \$1000 out of pocket maximum. Under both plans, preventive services were free. Plan A was selected to represent the

typical high deductible policy and Plan B the typical comprehensive policy. Two vignettes for Nichole and Paul are presented here for illustration.

- Nicole is 25 years old. She is single and has two children living at home. The children have health insurance (no premium) through the SCHIP program. Her household's pre-tax monthly income is \$3,930. She lives in Chicago and pays rent of \$1,450 monthly. If offered this plan for herself (only), the most that Nicole could afford to pay monthly for this plan would be: _____
- Paul is 55 years old. He is married and has two children living at home. The children have health insurance (no premium) through the SCHIP program. His household's monthly pre-tax income is \$4,710. He lives in Austin and pays rent of \$875 monthly. If offered this plan for himself AND HIS SPOUSE, the most that Paul could afford to pay monthly for this plan IN TOTAL FOR BOTH OF THEM would be: _____

National sample

Knowledge Networks conducted the general public survey, using its research panel (KnowledgePanel), which incorporates both random-digit-dial and address-based sampling methods. The sampling frame included both listed and unlisted phone numbers, telephone and non-telephone households, and cell-phone only households. The panel is considered to be reasonably nationally-representative and valid,^{12,13} and has been described in detail elsewhere.¹⁴

The total sample consisted of a representative sample of the population of 18-64 years old, and an oversample of those with incomes between 150% and 400% of the FPL, the group most likely to receive subsidies. In October 2009, Knowledge Networks fielded 6,039 interviews in total, of which 3,962 (65.6%) were completed. Of these, 3,032 were from the general population and 930 were from 150%-400% FPL sample. The general population sample provides insight on overall voter perceptions, and the lower income subsample provides insights from those who are most impacted by changes in the ACA. The final sample was cross-checked with United States Census data to ensure that major sociodemographic characteristics of the sample were generally representative of the US population.

All respondents were presented with 8 out of the 61 vignettes, core household characteristics (which did not vary), and non-core vignette household characteristics (which were presented at random). The order of vignettes was shuffled for each respondent. Half of the survey respondents were randomly asked how much each vignette household could afford to pay each month for insurance Plan A, while the other half were asked about Plan B.

Respondents could select amounts in increments of \$50 (i.e. \$0-\$50, \$51-\$100, etc.). For vignettes in which the household consisted of a single adult (with or without children), respondents could choose among categorical responses ranging from “Nothing” to “More than \$500/month.” For vignettes that described married couple households, respondents were asked to specify how much the household could pay for coverage for both adults in the household and could select amounts ranging from “Nothing” to “More than \$1000/month.”

Statistical analyses

To assess factors affecting affordability determinations, we used ordinary least squares regression models to examine both affordability standards and the relationship between respondent characteristics and affordability assessments. The latter regressions controlled for all vignette characteristics (income, age, housing costs, etc.) and a separate regression was run for each respondent characteristic (e.g., respondent age, respondent income, respondent political views).

Results

We first looked at what the respondents thought the vignette characters could afford to pay for health insurance policies on average. We then looked at how the characteristics of the respondents themselves—characteristics such as their income or whether they reside in a red state or a blue state—might influence their perception of the vignette characters' ability to pay for difference insurance products. All of our findings were strongly statistically significant unless reported otherwise.

Respondents reported that, on average, a health insurance policy should be about 4.9% of household income to be affordable. Respondents felt that, in 81% of single vignette cases and 85% of married vignette cases, the dollar amount that households could afford to pay for health insurance rose with household income in a linear relationship. That is, whether the vignette character's household income was low or high, the respondents felt that they could afford to pay about 4.9% of household income.

Respondents believed that younger vignette characters—particularly singles—could pay somewhat more for health insurance than older characters. They also believed

that healthier people could afford to pay more than those in poor health. Finally, debt played a role in decision-making for many respondents. In comparison to households with savings, households that carried a lot of debt were seen as unable to pay more for health insurance. Factors such as the vignette character's educational attainment seemed to matter less to the respondents than concrete factors such as income.

Influence of respondent characteristics

We also examined the impact of the respondent's characteristics on affordability assessments, controlling for vignette characteristics. Whether the respondent lived in a red state or a blue state, the respondents generally had similar views of insurance policy affordability across the vignettes.

However, household characteristics such as income did matter in some ways; wealthier respondents felt that the vignette characters could generally afford to pay for higher insurance premiums than those of more modest means. However, even the wealthier respondents felt that the relationship between household income and affordability should be linear rather than progressive.

Finally, the quantitative survey contained a single, open-ended question that respondents could fill in. For this question, respondents often stated what their assumptions were in generating a rule-of-thumb, but also pondered their assumptions as well as their general feelings about the survey. These notes helped contextualize the quantitative responses on the survey. Those that did respond often stated that they had to make guesses about the vignette characters' costs and circumstances based on imperfect information. Irrespective of the comment the respondents made, they tended to use income much more

frequently than other words, and used words such as rent, expenses, living, and food less than half as often. This suggests that income was the dominant factor weighing on the minds of most respondents.

Conclusions

In our representative sample of American households, we find that respondents do not feel that affordability standards should be set on a steeply progressive curve, as they are in the ACA. In the ACA, lower income households pay a smaller share of income than higher income households—a transfer of money from wealthy households to low-income ones. But they also do not feel that a fixed dollar amount credit—the subsidy design preferred by Republican lawmakers—is fair either. Rather, respondents felt that a plan was affordable so long as it consumes less than about 5% of household income, no matter how big that income might be.

Using a fixed percentage of income is essentially a “middle ground” between offering a regressive fixed dollar credit amount irrespective of income (as in the proposed alternative plans) and offering a steeply progressive credit that increases as household income declines. When considering subsidies for health insurance premiums, a fixed percentage subsidy is progressive in that there is in fact a net transfer of wealth from wealthy to poor households because high-income households pay the full cost of their premiums.

Our study suffered from a number of limitations inherent to vignette-based surveys. Foremost, it is impossible to present comprehensive information about the vignette characters’ household characteristics to respondents. To better understand how missing vignette household information may inform participant responses, we rotated variables of

interest through many of the vignettes, and then assessed the independent effect of these variables on the participants' affordability scores. Still, many respondents reported that they struggled to make assumptions about the vignette characters. Second, this was a novel survey administered to a broad array of Americans. It was therefore necessary to limit and simplify the background information (e.g., information on insurance markets) presented to each respondent.

To extrapolate the affordability standards we explore here onto the tax credits lawmakers plan to provide—Americans want lawmakers to provide extra funding for the sick, elderly, and even to those in debit. In each of these ways, current reform efforts that discount these factors are likely to run into headwinds.

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