VIEWPOINT

Choosing a Health Insurance Plan Complexity and Consequences

Saurabh Bhargava, PhD

Carnegie Mellon University, Pittsburgh, Pennsylvania.

George Loewenstein, PhD

Carnegie Mellon University, Pittsburgh, Pennsylvania. **Individuals who dread** the annual ritual of choosing a health insurance plan might take solace in learning that they are not alone in feeling overwhelmed by the complexity of plan choice. For many, selecting a health plan is a source of considerable confusion and distress. The complexity of plan choice arises in part from wide variation among plans across the 4 features that determine how health costs are shared between the insurer and enrollee: the deductible, co-payment, co-insurance, and out-of-pocket spending limits. Consumers aspiring to make an informed choice across plans must evaluate the trade-off between each of these cost-sharing features and premiums, after carefully considering their projected health expenses, because paying for greater cost-sharing makes most sense if a person anticipates significant medical costs. Recent research, however, suggests that most consumers do not understand even the basics of health insurance. A 2013 survey of 202 insured US adults found that only 14% could answer 4 simple multiplechoice questions regarding the definition of costsharing features. Additionally, when presented with a simplified plan, most respondents were unable to accurately estimate the cost of their medical services.¹ Complicating decisions further, plans typically differ on additional dimensions, such as which physicians

Individuals who dread the annual ritual of choosing a health insurance plan might take solace in learning that they are not alone in feeling overwhelmed by the complexity of plan choice.

are included in the network, the medical services covered, and insurer reputation for the speed and ease of processing claims.

This lack of understanding has significant consequences. A recent study investigated the decisions of 23 894 employees at a Fortune 50 firm who "built" their own insurance policy from a menu of 48 plans that differed in cost sharing (eg, employees could choose between 4 available deductibles) and in premiums but were otherwise identical (eg, plans were administered by the same insurer and featured the same physician networks).² Because premiums for the plans were set in a manner that made high-deductible plans unambiguously less expensive than other plans, regardless of the employee's health or tolerance for financial risk, this setting provided a clear test of the ability of consumers to make good decisions. Employ-

ees failed this test. Sixty-one percent of employees chose plans for which no level or pattern of their health care spending could justify their choice. These mistakes led to overspending by employees equivalent to 42% of the cost of their yearly insurance premiums.

Intuition might point to the large number of available plans as the underlying cause for inefficient plan choice, but a series of follow-up studies found that individuals made nearly identical choices when given a small number of simply presented options. The research concluded that the main barrier to financially efficient choice was not the number of options confronting employees, nor the transparency of their presentation, but rather the same lack of basic understanding of health insurance revealed by survey respondents in the previously discussed study of health insurance literacy.

The consequences of complicated insurance plans extend beyond the choices people make between policies. Much of the complexity of health insurance comes from elaborate incentives designed to discourage inefficient use of medical services. However, such incentives are unlikely to have much influence on the decisions of individuals who do not understand their policies.^{3,4}

The architects of the Affordable Care Act (ACA) were not naive to the perils of complicated plan choice. The

legislation enacting the ACA funded informational outreach, standardized coverage so that every plan covered a set of basic medical services, and mandated transparent communication of plan details. Perhaps most notably, the ACA organized plans on its exchanges into 4 different cost-sharing "tiers." Within each tier, plans were required to cover a predetermined fraction of essential health ex-

penses for the typical plan enrollee. Tiers were given distinctive metal labels corresponding to their actuarial level of coverage so that bronze plans paid approximately 60% of covered spending across all enrollees, whereas silver (70%), gold (80%), and platinum (90%) plans offered higher levels of financial coverage. However, one investigation of hypothetical plan choices with plan menus designed to mimic those of the exchanges found that metal labels (eg, bronze, silver, gold), rather than facilitating better decisions, worsened choices compared with generic labels (eg, plan A, plan B, plan C) (unpublished data, S. B., G. L., and S. Benartzi, "The Costs of Poor Health Plan Choice and Prescriptions for Reform." Carnegie Mellon University working paper). The same study found that alternative plan labels that encouraged consumers to forecast how much care they anticipated needing did have a modestly beneficial effect, suggesting that participants

Corresponding Author: George Loewenstein, PhD, Carnegie Mellon University, Department of Social and Decision Sciences, 208 Porter Hall, Pittsburgh, PA 15213 (gl20@andrew .cmu.edu).

jama.com

JAMA December 15, 2015 Volume 314, Number 23

may have misinterpreted metal labels as signals of quality, or the breadth of services covered, rather than the degree of cost sharing.

Although the media and policy makers have devoted considerable attention to how the ACA has influenced the magnitude of plan premiums, the question of whether consumers make sensible choices given the premiums they face has been largely ignored. Despite strict regulations governing how plans are priced, consumers may risk financial loss by choosing a plan incommensurate with their health needs.

To appreciate the financial consequences of choice in the ACA exchanges, consider a childless couple of 40-year-old nonsmokers, with income level exceeding 400% of the Federal Poverty Level and residing in Pittsburgh, Pennsylvania. Based on their demographic characteristics and information about available plans in their area, last year this couple would have a choice of 54 plans ranging in annual premiums from \$3648 to \$10 584.5 To simplify the example, suppose that this couple restricted themselves to a choice between the least expensive plans from each of the 4 tiers, which, in this example, happen to be offered by the same insurer. At one extreme, suppose the couple was relatively healthy and ended up needing little or no health services beyond preventive care. If this couple had wisely chosen the bronze plan, they would have spent a total of \$3648 (premium + no out-of-pocket spending), which is less than half of the \$8748 they would have spent had they chosen the platinum plan. At the opposite extreme, suppose the couple was unhealthy and incurred medical care costs that exceeded the spending limits set by the ACA (eg, an episode involving a short hospitalization). This couple would have spent a minimum of \$11 184, had they chosen the gold plan (the best plan for them), and up to \$17 292 if they had chosen the silver plan (the worst plan for them). The differences in projected spending are unaffected by the premium tax credit for which most enrollees are eligible, but which can be applied to any tier. These estimates would change for the smaller number of couples whose income qualifies them for a cost-sharing reduction, which requires enrolling in a silver tier plan. The consequences of plan choice are therefore significant. To make a financially efficient choice, enrollees, most of whom lack extensive prior experience with insurance, would have to carefully consider the complicated relationship between plan cost, cost sharing, and their expected health risk.

Given the complexity and consequences of these decisions, what can policy makers do? Behavioral economists have proposed strategies such as providing consumers with decision aids-eg, education through scenario-based examples or personalized recommendations—or, more aggressively, the use of plan "defaults" or restricted menus tailored to each consumer. 6 However, while intelligently designed choice architecture has improved decisions in other domains, ⁷ a more effective long-term policy would be to encourage substantial simplification of health insurance. Insurance products free of the complex features that consumers are least able to understand, such as deductibles and co-insurance, would more likely help consumers make informed decisions regarding plan choice and utilization. Simpler insurance may also lead to better market outcomes, such as lower-priced and higher-quality plans. Recent research by behavioral economists finds that when consumers are confused about product features—for example, by credit cards with short-lived "teaser" rates-market competition is less likely to benefit consumers in the ways that economists typically predict.⁸

The economic rationale policy makers have offered for the expansion of choice (as exemplified by the 47 plans available to the typical ACA enrollee) is that greater choice will enable consumers to find plans that meet their needs and will stimulate competition among insurers, leading to improvements in plan price and quality. However, these benefits are unlikely to emerge if consumers are incapable of making informed plan comparisons. Taken together, the evidence suggests that policies advancing the fundamental simplification of insurance may offer the greatest promise of improving the quality of enrollee decisions, encouraging advantageous competition between insurers, and alleviating the anxiety that grips consumers every year during open enrollment.

ARTICLE INFORMATION

Conflict of Interest Disclosures: All authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

REFERENCES

- 1. Loewenstein G, Friedman JY, McGill B, et al. Consumers' misunderstanding of health insurance. J Health Econ. 2013;32(5):850-862.
- 2. Bhargava S, Loewenstein G, Sydnor J. Do employees make sensible health insurance

decisions? evidence from a menu of dominated options. National Bureau of Economic Research working paper No. 21160, http://www.nber.org /papers/w21160.

- 3. Baicker K, Mullainathan S, Schwartzstein J. Behavioral hazard in health insurance. Q J Econ. doi:10.1093/aie/aiv029.
- 4. Koh HK, Rudd RE. The arc of health literacy. JAMA. 2015:314(12):1225-1226.
- 5. https://www.healthcare.gov/see-plans. [zip code 15232]. Accessed October 10, 2015.
- 6. Johnson EJ, Hassin R, Baker T, Bajger AT, Treuer G. Can consumers make affordable care affordable? the value of choice architecture. PLoS One. 2013:8 (12):e81521.
- 7. Thaler R, Sunstein CR. Nudge: Improving Decisions About Health, Wealth, and Happiness. New York, NY: Penguin Books: 2009.
- 8. Gabaix X, Laibson D. Shrouded attributes, consumer myopia, and information suppression in competitive markets. Q J Econ. 2006;121(2):505-540.