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ARTICLE

The Simple Case Against Health Insurance Complexity

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Making health plans simpler and more understandable to consumers will help them to make efficient decisions, thereby alleviating both the financial and psychological burdens of enrollment.

While few financial decisions are as consequential as those related to the choice of health insurance, such decisions can be complicated, and even overwhelming, for consumers. When consumers choose among plans offered by their employer, the Affordable Care Act (ACA), or Medicare, they must evaluate options that differ not only in cost-sharing but also in non-financial dimensions, such as which doctors or hospitals are included "in-network" and the insurer's reputation for reliably processing claims. Furthermore, communication of critical plan details is frequently inconsistent across health plans, making it difficult for consumers to easily compare options.

Recent public and private expansions of plan choice have increasingly tasked consumers with difficult plan comparisons, even as evidence suggests that many people may not understand the fundamental building blocks of insurance. One representative survey of insured U.S. adults found that only 14% provided correct responses to four simple multiple-choice questions testing their definitional understanding of standard plan features — copayments, coinsurance, maximum out-of-pocket spending, and deductibles — that affect how health costs are split between a consumer and the insurer. The same survey found that few respondents were able to estimate the cost of basic medical services after reading a simple description of a hypothetical insurance policy. It is not surprising that, without a clear understanding of health insurance basics, many people report being confused and ill-prepared when asked to make an enrollment decision. This widespread confusion presents a strong rationale for encouraging simplicity and standardization of health plans.

A Gut-Wrenching Choice

Health plan enrollment can be a stressful experience for consumers not only because of the complexity of plan choices but also because making an informed decision requires consumers to think about financially and emotionally unpleasant contingencies. Because the most important differences between plans involve financial cost-sharing, consumers should largely base their plan choice on how much health care they anticipate needing over the next year (as well as their appetite for risk and degree of liquidity).

> *"When a consumer makes a plan choice, she is effectively placing a financial bet on her own, or her family's, future health. For those who make the wrong guess, the decision can be fateful."*

Consumers who expect to be healthy in a particular year, for example, will likely save money with a cheaper, high-deductible, plan. When a consumer makes a plan choice, therefore, she is effectively placing a financial bet on her own, or her family's, future health. For those who make the wrong guess, the decision can be fateful, particularly for the estimated 1 in 3 households that do not have the financial means to cover the high deductibles commonly associated with employer-sponsored care.

The unpleasantness of choosing a health plan may be one reason why so few consumers revisit their plan choices in subsequent years. This widely documented "inertia" in health plan choices means not only that most consumers fail to improve upon the quality of their original insurance decisions but also that they fail to modify their decisions to keep up with changes in plan prices or their own health.

A Litmus Test for Sensible Plan Choice

In our research, we investigated consumers' ability to make sensible plan choices by examining the decisions of employees at a Fortune 50 firm. Employees at this firm were asked to "build" their own policy by indicating their preferred choice from a menu of four deductibles, two coinsurance rates, two copayments, and three out-of-pocket maximums (Table 1).

TABLE 1.

Table 1. Health Plan Menu for Employees at a Fortune 50 Firm*

Plan Feature	Levels Available
Annual Deductible	$350, $500, $750, $1000
Coinsurance Rate	80%, 90%
Copayment	$15, $25
Out-of-Pocket Maximum	$1500, $2500, $3000

Source: Bhargava S, Loewenstein G, and Sydnor J. "Do Individuals Make Sensible Health Insurance Decisions? Evidence from a Menu with Dominated Options," NBER Working Paper No. 21160, 2015

This 48-plan menu provided a rare litmus test for evaluating choice quality because, outside of differences in the four cost-sharing features, the available plan options were otherwise identical: the plans were administered by the same insurer, and they featured the same networks and the same set of covered services.

> *"Employees choosing the most generous coverage (i.e., a plan with a $350 deductible) spent an average of $590 in excess of what they might have otherwise spent, with 25% of these employees foregoing savings of $843 or more."*

What made the setting especially interesting was that for nearly every one of the plans with low deductibles ($350, $500, or $750), the otherwise equivalent plan with a high deductible ($1,000) would end up costing the employee less, regardless of the individual's health care utilization. When a plan with a certain deductible is guaranteed to result in higher total spending than an otherwise equivalent plan, economists call it a financially "dominated" plan.

Table 2 depicts plan costs, rounded to the nearest $50, for the four plans available to employees for a fixed copayment, a fixed coinsurance rate, and an out-of-pocket maximum of $1,500. The table shows that the plan with the $1,000 deductible results in lower total health care spending regardless of whether the individual incurred no health care expenses, $1,000 in expenses, or expenses that exceeded the out-of-pocket maximum (the same is true for all other levels of health care expenses).

TABLE 2.

Table 2. Simplified Plan Menu Facing Employees*

Deductible	Premium	Total Spending with $0 in Bills	Total Spending with $1,000 in Bills	Total Spending with Bills Exceeding Out-of-Pocket Maximum
$350	$1950	$1950	$2450	$3800
$500	$1400	$1400	$2000	$3400
$750	$1300	$1300	$2100	$3550
$1000	$800	$800	$1800	$3300

Source: Bhargava S, Loewenstein G, and Sydnor J. "Do Individuals Make Sensible Health Insurance Decisions? Evidence from a Menu with Dominated Options," NBER Working Paper No. 21160, 2015

So, how did employees do? We found that 61% of employees chose dominated plans and that these employees spent an average of $353 more over the year than if they had chosen the corresponding high-deductible plan. This difference was equivalent to about 24% of the cost of employees' original plan premium and 50% of the premium associated with the superior plan alternative. The consequences of these choices were largely driven by the chosen deductible: employees choosing the most generous coverage (i.e., a plan with a $350 deductible) spent an average of $590 in excess of what they might have otherwise spent, with 25% of these employees foregoing savings of $843 or more. Lower earners were more likely to choose dominated plans, and most employees did not switch into more advantageous plans in the subsequent year.

> *"One representative survey of insured U.S. adults found that only 14% provided correct responses to four simple multiple-choice questions testing their definitional understanding of standard plan features."*

It is possible that employees knowingly chose financially dominated low-deductible plans because they wanted to avoid the inconvenience of variable medical costs or large unexpected health bills and they valued the predictability of future health expenses. However, the financial cost of such a preference is not insignificant. For example, employees who chose plans with a $750 deductible paid an average of $528 in additional premiums over the year compared with those who selected a plan with a $1000 deductible, even though the largest amount that they could have saved with the lower-deductible plan was only $250.

We investigated the factors driving consumers to choose dominated plans in follow-up studies designed to clarify how employees handled their insurance plan decision. In these studies, we asked subjects to make hypothetical insurance plan choices from simple menus that varied in size (with regard to both the number of plans and the number of plan attributes) and transparency. While reducing the number of options did not substantially improve choice quality, we found that transparency had a significant effect: when provided with a menu that carefully communicated how individual plan features translated into total health spending under different scenarios (similar to the presentation in Table 2), subjects were substantially less likely to choose a financially dominated plan. We also measured knowledge of health insurance using three distinct assessments. For each, we found that people who scored as more knowledgeable were less likely to choose dominated options. Together, these results suggest that employees' choice of dominated plans was not a purposeful decision but instead arose from confusion and a lack of health insurance literacy.

The Long Shadow of Insurance Complexity

The repercussions of insurance complexity likely extend beyond inefficient plan choice. Even after enrollment, plan features such as copayments and deductible levels (theoretically intended to contain costs) can precipitate complicated, emotionally laden decisions. For example, suppose your child is running a high fever over the weekend, when your family doctor's office is closed. Should you incur the expense of a trip to the emergency room or urgent care, or should you risk waiting to see the family doctor? For low-income households, cost-sharing may manifest as a draconian trade-off between a needed car repair and precautionary action to avoid risking the health of a child. Given that many people struggle to estimate the costs associated with a trip to the emergency room and are certainly not trained to accurately assess health risks, we can begin to understand how the psychological burden of health care decisions is compounded by consumers' incomprehension of their health insurance policies.

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A recent study illuminates how complicated cost-sharing influences the decision to seek medical care. The study examined how employees responded in their demand for medical care when their employer transitioned from a plan with no cost-sharing (i.e., no deductible) to a plan with a high deductible and an out-of-pocket maximum (a traditional cost-sharing structure). This "natural experiment" revealed, perhaps unsurprisingly, that the introduction of cost-sharing reduced overall spending on health by 12% to 14%. However, while most would applaud savings arising from more judicious use of care, the savings in this setting appeared to result from an indiscriminate reduction of both wasteful care (e.g., unnecessary imaging) as well as potentially valuable care (e.g., preventive care). Furthermore, the authors found that, under the new plan, employees exhibited extreme sensitivity to prices before their deductible had been reached even if they were almost certain to reach

their deductible by year's end. That study offers yet another demonstration of how complexity in the pricing of insurance can distort behavior — in this case, in terms of the utilization of medical care rather than in terms of the choice of plans.

A Simple Strategy for Policymakers

It is tempting to conclude that the problem of inefficient health plan decisions could be remedied through education or decision aids. After all, our findings indicated that consumers made better choices when provided with information that clarified plan costs and trade-offs. However, it is much easier to provide education or decision aids in the experimental lab than in the real world, and, even in the lab, such interventions are not always successful. We believe that the most promising strategy for addressing problems caused by complexity is to reduce the complexity. Rather than providing education or information at the point of enrollment, the goal should be to make plans simple enough so that even poorly informed consumers can understand them. Making health plans simpler and more understandable to consumers will help them to make efficient decisions, thereby alleviating both the financial and psychological burdens of enrollment.

> *"Enrolling all employees, without choice, in the single on-average best plan would have left them nearly as well off as if every employee chose the retrospectively best plan for themselves from a large plan menu."*

These changes can be achieved through a combination of simplification and standardization. Plan choice could be simplified by reducing the number of plan options and the complexity of plan structure. The previously mentioned study that documented the difficulty that consumers experience in understanding insurance decisions arose from a collaboration with an actual insurance company, which subsequently drew on the research to design a simplified plan that eliminated the two least understood cost-sharing features: the deductible and coinsurance. That company continues to market this simplified plan many years later, suggesting that simplifying insurance options is both feasible and commercially viable.

Simplification and standardization of plan offerings may benefit consumers beyond facilitating the decision-making process. Research by economists shows that when consumers do not fully understand product options, firms may compete through products and marketing intended to exploit, rather than benefit, consumers (e.g., teaser rates in the credit card market). If all firms were required to offer the same set of simple products, they would have more pressure to compete on price and dimensions of provider quality.

Our research offers one last challenge to the economic rationale underlying recent public and private expansions of plan choice. For the each of the 23,897 employees in the Fortune 50 firm described earlier, we calculated the amount that an individual could have saved if she had chosen the plan (from among the 48 plans available) that would have minimized her costs given the

amount of care she ended up requiring (which could not have been known in advance). We also computed the amount that each employee would have saved if all employees had been enrolled in the same single plan that minimized average costs across employees.

> *"We believe that the most promising strategy for addressing problems caused by complexity is to reduce the complexity."*

The difference between these two amounts was very small: optimal plan enrollment would have saved the average employee $364, whereas automatic enrollment of all employees in the single actuarially best plan would have saved the average employee $323.

This finding suggests that enrolling all employees, without choice, in the single on-average best plan would have left them nearly as well off as if every employee chose the retrospectively best plan for themselves from a large plan menu (a highly unrealistic scenario given the low quality of plan choices that we actually observed). At the extreme, we imagine that a market featuring a single plan, or a small set of transparently differentiated plans, with provisions to ensure high consumer participation and competitive pricing, would serve most consumers well.

Given the substantial economic and psychological consequences of insurance complexity for plan enrollment, health care utilization, and competition between insurers, we believe that the case for policies that promote simplicity and standardization is simply overwhelming.

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