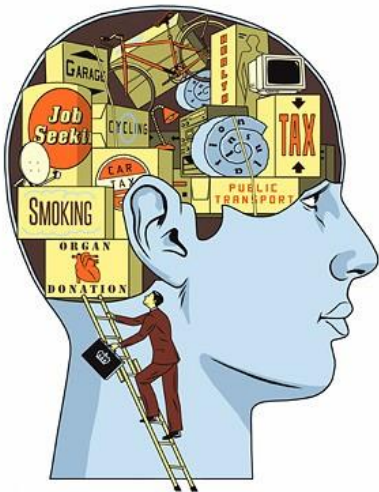

Health Insurance and the Affliction of Choice

Saurabh Bhargava, Carnegie Mellon University



Brookings Institute
Conference on Behavioral Economics
September 2015

Recent Explosion in Health Plan Choice...

HealthCare.gov

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Get Insurance

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Español

Individuals & Families

Small Businesses

All Topics

SEARCH

31 Health Plans

All plans (31)

Bronze Plans (9)

Silver Plans (9)

Gold Plans (9)

Platinum Plans (4)

Insurance company

Blue Cross Blue Shield Louisiana

Louisiana Health Cooperative

AAA Vantage Health Plan

All health plans must offer the same essential health benefits.

These benefits include coverage for things like:

- Doctor visits
- Prescription drugs
- Hospitalization
- Maternity and newborn care
- Preventive care

Plans can offer other benefits, like vision, dental, or medical management programs for a specific disease or condition. As you compare plans, you'll see what benefits each plan covers.

PLAN A

PLAN B

PLAN C

Health plans for one individual, age 40, living in Acadia County, LA.

Change

Based on a household size of one and income of \$30,000, you may qualify for a **\$95/month tax credit** you can choose to apply to your premium for these plans. This tax credit has been applied to the premiums below.

Blue Max 80/60 \$5000

DETAILS

APPLY

| | | | |
|---|--|---|---|
| <div>Monthly premium</div> <div>\$135/mo</div> <div>One enrollee</div> <div>Premium before tax credit \$230/mo</div> | <div>Deductible</div> <div>\$5,000/yr</div> <div>Per individual</div> | <div>Out-of-pocket Maximum</div> <div>\$6,350/yr</div> <div>Per individual</div> | <div>Copayments/Coinsurance</div> <div> <div>Primary Doctor: 20%</div> <div>Coinurance after deductible</div> <div>Specialist Doctor: 20%</div> <div>Coinurance after deductible</div> <div>Generic Prescription: 20%</div> <div>Coinurance after deductible</div> <div>ER Visit: 20%</div> <div>Coinurance after deductible</div> </div> |
|---|--|---|---|

Typical ACA Marketplace enrollee faces **47 plan options**

Number of Medicare Part D Stand-Alone Prescription Drug Plans, by State, 2013

U.S. Total, 2013= 1,031

| Number of Plans | States/DC |
|-----------------|---------------|
| 23 - 29 plans | 12 states, DC |
| 30 - 31 plans | 18 states |
| 32 plans | 13 states |
| 33 - 38 plans | 7 states |

Legend: 23 - 29 plans (12 states, DC), 30 - 31 plans (18 states), 32 plans (13 states), 33 - 38 plans (7 states)

SOURCE: Kaiser Family Foundation analysis of Centers for Medicare & Medicaid Services (CMS) PDP landscape source file, 2013.

THE KATIE KAISER FAMILY FOUNDATION

Typical Medicare Part D enrollee faces **30 plan options**

Economic Rationale for Expanding Choice?



“Exchanges offer Americans **competition**, **choice**, and **clout**. Insurance companies will compete for business on a transparent, level playing field, driving down costs, and Exchanges will give individuals... a choice of plans to fit their needs.”

- Kathleen Sebelius, former HHS Secretary

Economic rationale for expanded choice presumes individuals make sensible health plan decisions

New Evidence on Quality of Health Plan Choice

Bhargava, Saurabh, George Loewenstein, and Justin Sydnor. “Do Individuals Make Sensible Health Plan Decisions?” NBER Working Paper No. 21160, 2015.

- **Major US Firm**
 - Fortune 50 company (\$100B+ revenue)
 - 50,000+ benefit eligible employees
 - Self-insured health coverage since 2008
- **Data on Employee Choice and Spending for 2010 to 2012**

3 key features of firm setting offer litmus test for assessing employee ability to make sensible choices...

1

Firm Let Individuals “Build their Own Plan”

| Plan Name | Deductible Individual / Family | Coinsurance (after deductible) | Out Of Pocket Max Individual / Family | Office Visit Copayment |
|-------------------|--------------------------------|--------------------------------|---------------------------------------|-------------------------------------|
| Medical Option 01 | \$350 / \$700 | 90% | \$1,500 / \$3,750 | \$15 primary care / \$40 specialist |
| Medical Option 02 | \$350 / \$700 | 90% | \$2,500 / \$6,250 | \$15 primary care / \$40 specialist |
| Medical Option 03 | \$350 / \$700 | 90% | \$3,000 / \$7,500 | \$15 primary care / \$40 specialist |
| Medical Option 04 | \$350 / \$700 | 90% | \$1,500 / \$3,750 | \$25 primary care / \$35 specialist |
| Medical Option 05 | \$350 / \$700 | 90% | \$2,500 / \$6,250 | \$25 primary care / \$35 specialist |
| Medical Option 06 | \$350 / \$700 | 90% | \$3,000 / \$7,500 | \$25 primary care / \$35 specialist |
| Medical Option 07 | \$350 / \$700 | 80% | \$1,500 / \$3,750 | \$15 primary care / \$40 specialist |
| Medical Option 08 | \$350 / \$700 | 80% | \$2,500 / \$6,250 | \$15 primary care / \$40 specialist |
| Medical Option 09 | \$350 / \$700 | 80% | \$3,000 / \$7,500 | \$15 primary care / \$40 specialist |
| Medical Option 10 | \$350 / \$700 | 80% | \$1,500 / \$3,750 | \$25 primary care / \$35 specialist |
| Medical Option 11 | \$350 / \$700 | 80% | \$2,500 / \$6,250 | \$25 primary care / \$35 specialist |
| Medical Option 12 | \$350 / \$700 | 80% | \$3,000 / \$7,500 | \$25 primary care / \$35 specialist |
| Medical Option 13 | \$500 / \$1,000 | 90% | \$1,500 / \$3,750 | \$15 primary care / \$40 specialist |
| Medical Option 14 | \$500 / \$1,000 | 90% | \$2,500 / \$6,250 | \$15 primary care / \$40 specialist |
| Medical Option 15 | \$500 / \$1,000 | 90% | \$3,000 / \$7,500 | \$15 primary care / \$40 specialist |
| Medical Option 16 | \$500 / \$1,000 | 90% | \$1,500 / \$3,750 | \$25 primary care / \$35 specialist |
| Medical Option 17 | \$500 / \$1,000 | 90% | \$2,500 / \$6,250 | \$25 primary care / \$35 specialist |
| Medical Option 18 | \$500 / \$1,000 | 90% | \$3,000 / \$7,500 | \$25 primary care / \$35 specialist |
| Medical Option 19 | \$500 / \$1,000 | 80% | \$1,500 / \$3,750 | \$15 primary care / \$40 specialist |
| Medical Option 20 | \$500 / \$1,000 | 80% | \$2,500 / \$6,250 | \$15 primary care / \$40 specialist |
| Medical Option 21 | \$500 / \$1,000 | 80% | \$3,000 / \$7,500 | \$15 primary care / \$40 specialist |
| Medical Option 22 | \$500 / \$1,000 | 80% | \$1,500 / \$3,750 | \$25 primary care / \$35 specialist |
| Medical Option 23 | \$500 / \$1,000 | 80% | \$2,500 / \$6,250 | \$25 primary care / \$35 specialist |
| Medical Option 24 | \$500 / \$1,000 | 80% | \$3,000 / \$7,500 | \$25 primary care / \$35 specialist |
| Medical Option 25 | \$750 / \$1,500 | 90% | \$1,500 / \$3,750 | \$15 primary care / \$40 specialist |
| Medical Option 26 | \$750 / \$1,500 | 90% | \$2,500 / \$6,250 | \$15 primary care / \$40 specialist |
| Medical Option 27 | \$750 / \$1,500 | 90% | \$3,000 / \$7,500 | \$15 primary care / \$40 specialist |
| Medical Option 28 | \$750 / \$1,500 | 90% | \$1,500 / \$3,750 | \$25 primary care / \$35 specialist |
| Medical Option 29 | \$750 / \$1,500 | 90% | \$2,500 / \$6,250 | \$25 primary care / \$35 specialist |
| Medical Option 30 | \$750 / \$1,500 | 90% | \$3,000 / \$7,500 | \$25 primary care / \$35 specialist |
| Medical Option 31 | \$750 / \$1,500 | 80% | \$1,500 / \$3,750 | \$15 primary care / \$40 specialist |
| Medical Option 32 | \$750 / \$1,500 | 80% | \$2,500 / \$6,250 | \$15 primary care / \$40 specialist |
| Medical Option 33 | \$750 / \$1,500 | 80% | \$3,000 / \$7,500 | \$15 primary care / \$40 specialist |
| Medical Option 34 | \$750 / \$1,500 | 80% | \$1,500 / \$3,750 | \$25 primary care / \$35 specialist |
| Medical Option 35 | \$750 / \$1,500 | 80% | \$2,500 / \$6,250 | \$25 primary care / \$35 specialist |
| Medical Option 36 | \$750 / \$1,500 | 80% | \$3,000 / \$7,500 | \$25 primary care / \$35 specialist |
| Medical Option 37 | \$1,000 / \$2,000 | 90% | \$1,500 / \$3,750 | \$15 primary care / \$40 specialist |
| Medical Option 38 | \$1,000 / \$2,000 | 90% | \$2,500 / \$6,250 | \$15 primary care / \$40 specialist |
| Medical Option 39 | \$1,000 / \$2,000 | 90% | \$3,000 / \$7,500 | \$15 primary care / \$40 specialist |
| Medical Option 40 | \$1,000 / \$2,000 | 90% | \$1,500 / \$3,750 | \$25 primary care / \$35 specialist |
| Medical Option 41 | \$1,000 / \$2,000 | 90% | \$2,500 / \$6,250 | \$25 primary care / \$35 specialist |
| Medical Option 42 | \$1,000 / \$2,000 | 90% | \$3,000 / \$7,500 | \$25 primary care / \$35 specialist |
| Medical Option 43 | \$1,000 / \$2,000 | 80% | \$1,500 / \$3,750 | \$15 primary care / \$40 specialist |
| Medical Option 44 | \$1,000 / \$2,000 | 80% | \$2,500 / \$6,250 | \$15 primary care / \$40 specialist |
| Medical Option 45 | \$1,000 / \$2,000 | 80% | \$3,000 / \$7,500 | \$15 primary care / \$40 specialist |
| Medical Option 46 | \$1,000 / \$2,000 | 80% | \$1,500 / \$3,750 | \$25 primary care / \$35 specialist |
| Medical Option 47 | \$1,000 / \$2,000 | 80% | \$2,500 / \$6,250 | \$25 primary care / \$35 specialist |
| Medical Option 48 | \$1,000 / \$2,000 | 80% | \$3,000 / \$7,500 | \$25 primary care / \$35 specialist |

BYO PLAN MENU

(single-coverage employees)

- **Deductible Choice:**
 - \$350
 - \$500
 - \$750
 - \$1,000
- **Coinsurance:**
 - 90%
 - 80%
- **Out-of-Pocket Maximum**
 - \$1,500
 - \$2,500
 - \$3,000
- **Office Visit Copayment**
 - \$15
 - \$25

Employees Chose from Standardized Menus...

Build Your Own Medical Option

1. Which annual deductible meets your needs?

(Remember, a lower deductibles mean higher annual paycheck costs.)

Deductible Individual/Family

- ☐ **In Network**
\$350 Individual; \$700 Family
Out of Network
\$3,500 Individual; \$7,000 Family

- ☐ **In Network**
\$500 Individual; \$1,000 Family
Out of Network
\$3,500 Individual; \$7,000 Family

- ☐ **In Network**
\$750 Individual; \$1,500 Family
Out of Network
\$3,500 Individual; \$7,000 Family

- ☐ **In Network**
\$1,000 Individual; \$2,000 Family
Out of Network
\$3,500 Individual; \$7,000 Family

- ☐ **In Network**
\$1,250 Individual; \$2,500 Family
Out of Network
\$3,500 Individual; \$7,000 Family

Examples

- Bill knows that he'll need outpatient surgery costs as low as possible-and doesn't mind paying for a higher coverage option (\$350 deductible) is probably the best choice, but he'll also pay less down the road for surgery.
- Fiona has diabetes. She manages it well, but she's been hospitalized if she doesn't eat right or miss a meal. She's saved up, but that doesn't mean she wants to pay extra for a higher deductible. On the other hand, she doesn't like the idea of a middle coverage options (\$500 deductible) for a medical emergency.
- Barb and her husband are healthy with no chronic conditions, but that an unexpected health care expense could return for coverage with lower paycheck costs may be right for them.

What's Best for You?

Think about how likely it is you or a family member will need surgery. Also think about whether you can afford a higher deductible would cover more of your costs and lower costs later is higher costs in every paycheck.

[Continue](#)

[Cancel](#)

1. Deductible 2. **Coinurance** 3. Out-of-Pocket Maximum 4. Office Visit Copays

Build Your Own Medical Option

2. Which coinsurance option meets your needs?

(Remember, a higher coinsurance means higher paycheck costs.)

Coinurance

- ☐ **In Network**
90% Coinsurance
Out of Network
60% Coinsurance

- ☐ **In Network**
80% Coinsurance
Out of Network
50% Coinsurance

Examples

- Bill is expecting to have knee surgery soon and wants to have after he meets his deductible. By choosing the option with a share less of the cost of his surgery and the physical therapy he'll pay more from his paycheck for higher coinsurance, but he'll make in return for lower costs down the road.
- Fiona has diabetes-so even though she takes good care of herself, she's already planning on an option with a mid-range deductible. That's why she's probably right for her. Fiona may be a worrier but she's not a worrier for nothing. Why pay extra for a higher coinsurance option when she's already planning on a higher deductible?
- Barb and her husband rarely see the doctor-except for a medical emergency. They don't expect to meet their deductible, but they have many expenses. So why pay more for a higher coinsurance option when they never use? For Barb, the lowest coverage coinsurance option may be right for them.

What's Best for You?

Think about how much care you expect to need after you meet your deductible. A higher coinsurance percentage may make sense. If it's a good idea to decide if it's worth paying extra for higher coverage you expect to need. A difference in coinsurance for a \$100 service would only be a few dollars more in your paycheck.

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Details of Medical Options You've Created

1. Deductible 2. **Coinurance** 3. Out-of-Pocket Maximum 4. Office Visit Copays [Results](#)

Prices for **You Only**

[Redisplay](#)

[Compare other details of these plans](#)

[Find a doctor or hospital](#)

[See what you'll pay for medical coverage from options available to you](#)

Your Plan Choices for Enrollment

Option you've just built!

[Build Another Option](#)

[Build Another Option](#)

United Build-Your-Own PPO 47
[Edit This Option](#)

Your Answers

- | | | | |
|--|--|------|------|
| 1. Which annual deductible meets your needs? | In Network \$1,000 Individual; \$2,000 Family Out of Network \$3,500 Individual; \$7,000 Family Change answer | ---- | ---- |
| 2. Which coinsurance option meets your needs? | In Network 80% Coinsurance Out of Network 50% Coinsurance Change answer | ---- | ---- |
| 3. Which out-of-pocket maximum meets your needs? | In Network \$2,500 Individual; \$6,250 Family Out of Network \$7,500 Individual; \$20,000 Family Change answer | ---- | ---- |
| 4. What office visit copayment (copay) meets your needs? | In Network \$25 primary care; \$35 specialist Out of Network 50% coinsurance Change answer | ---- | ---- |

Your Pay Period Price

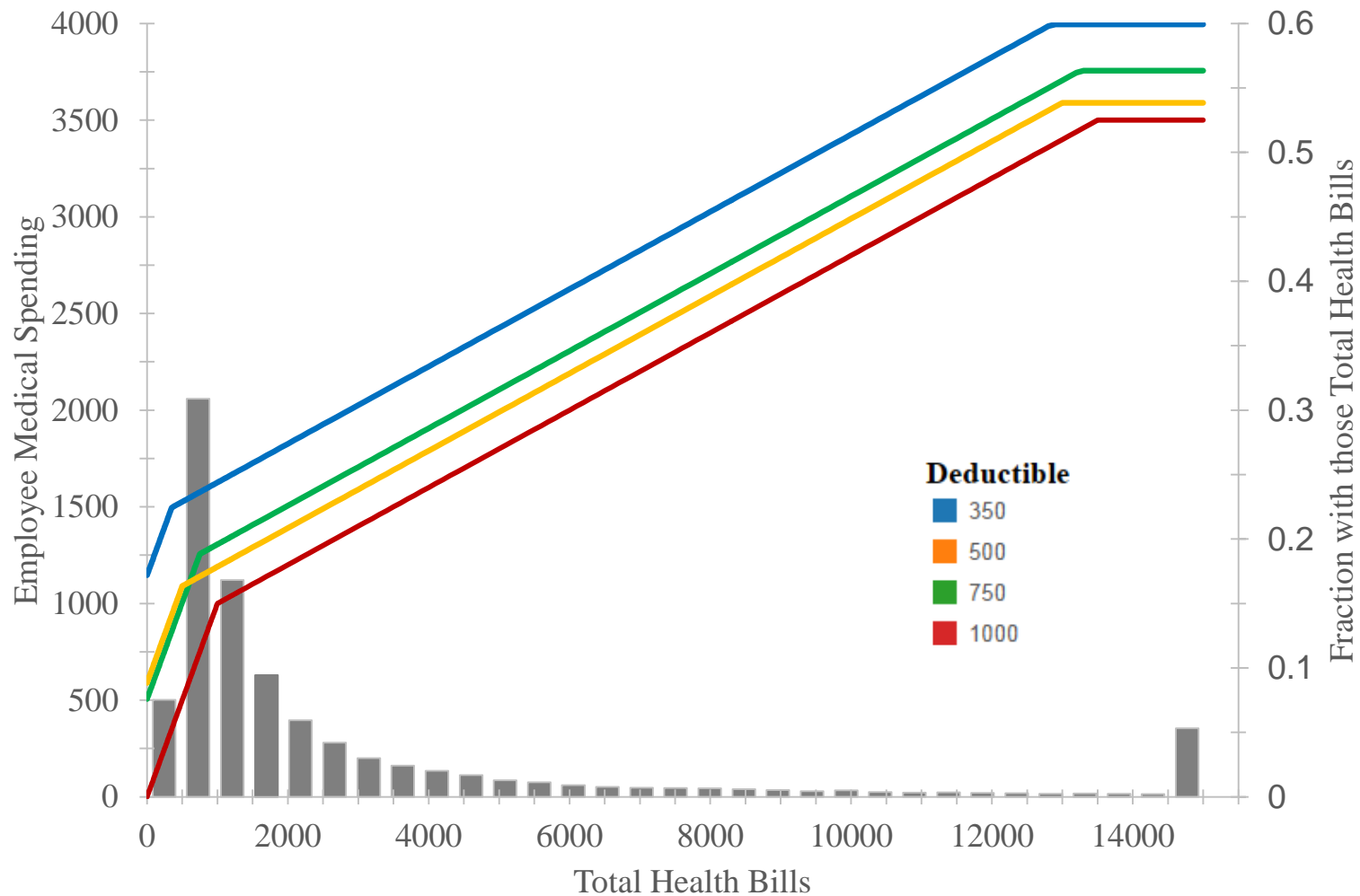
\$81.56

[Choose](#)

What Should I Do Next?

[Return](#) to Medical page to make your choice or compare with your other options.

3 Nearly Every Low-Deductible Plan was Dominated



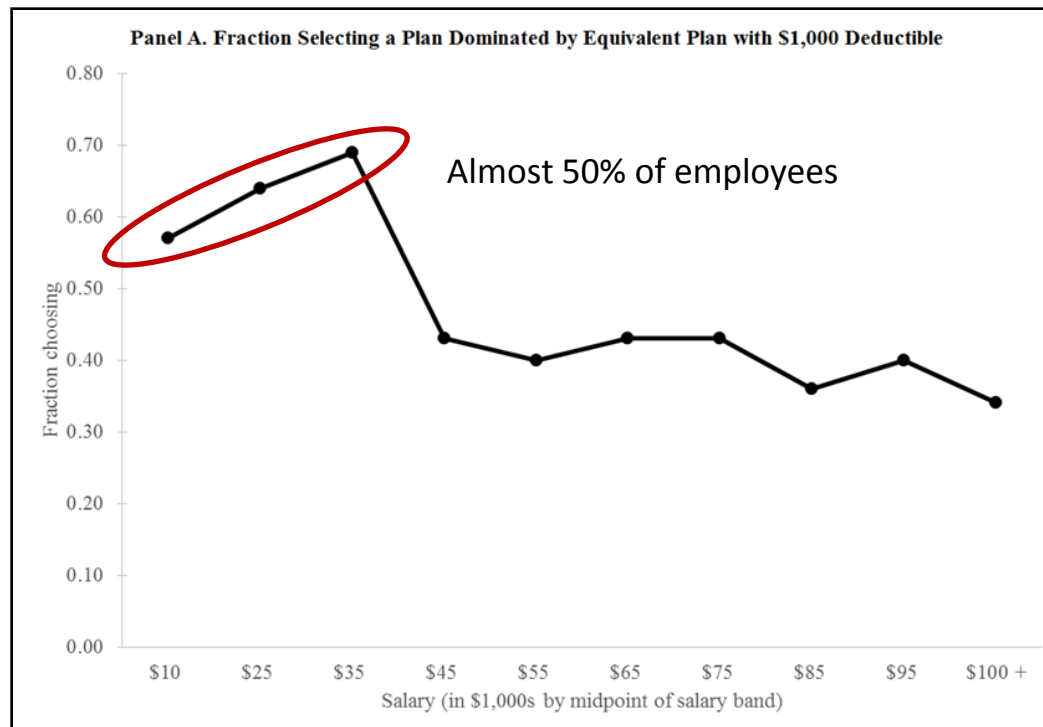
For any level of health expense nearly every plan w/ \$1k deductible was cheaper than otherwise equivalent low deductible plans

So Do Employees Make Sensible Plan Decisions?

- **55% of employees chose financially dominated health plans** (61% on pre-tax basis)

Example: Employees who chose \$500 deductible over the \$1,000 deductible spent \$630 in premiums to avoid expected \$230 in costs (max of \$500)

- **Economic consequences of are significant – excess cost equivalent to 42% of premiums**



Low income employees most likely to select plans with poor economic value

Why Did Employees Make Such Decisions?

We conducted a series of experiments in which ~4,000 thousand US adult subjects were asked to make hypothetical plan choices from simplified menus



Complexity of
Choice Interface

EXPERIMENT 1

Low Search
Motivation / Trust

EXPERIMENT 2

Low Health Plan
Literacy

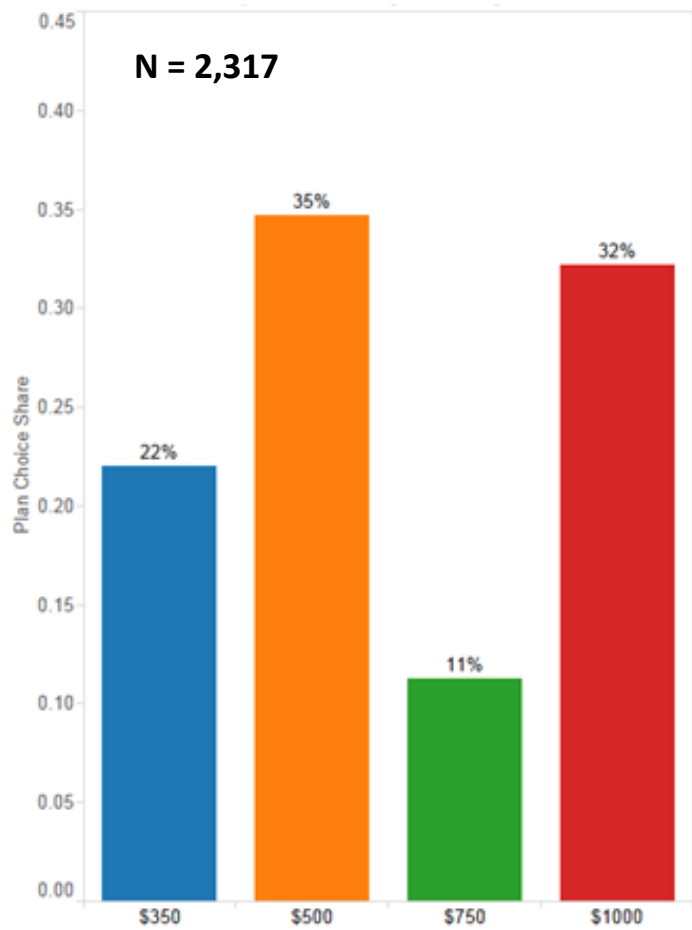
EXPERIMENT 3

Search and menu complexity modestly important but most still chose dominated plans when choosing from menu w/ 4 plans varying only in deductible and price

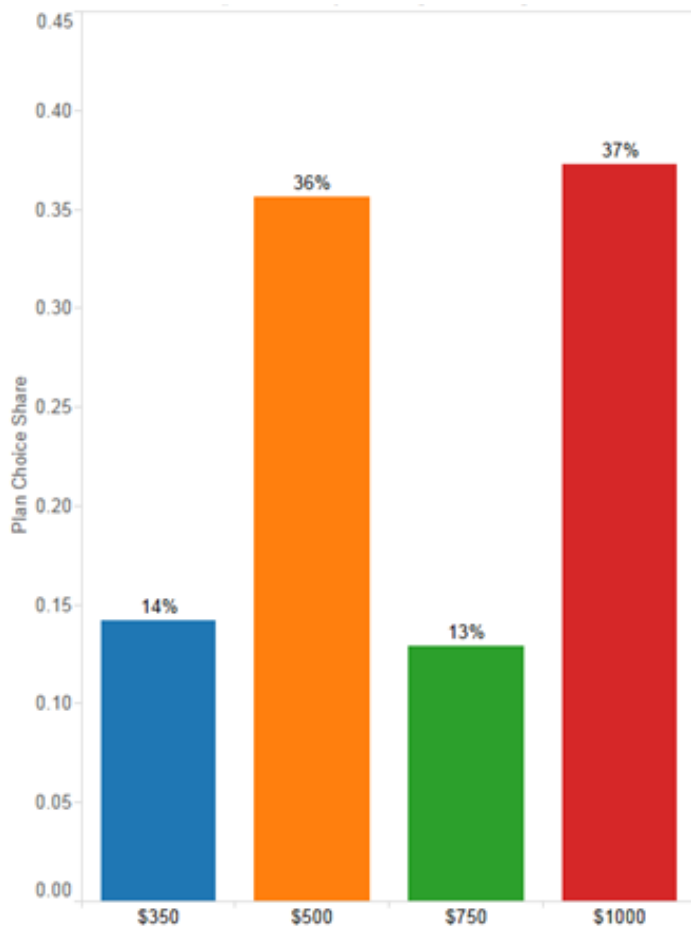
**Subjects suffered from very low health insurance literacy –
most could not evaluate basic differences in economic value of plans**

But Employees Do Not Choose Randomly...

Simple Choice Menu (Experiment)



Employee Sample



Choice Heuristics Gone Awry?

Suppose that you must choose a health plan from these options.

Plan A has a \$350 deductible and a \$1,912 annual premium.

Plan B has a \$500 deductible and a \$1,378 annual premium.

Plan C has a \$750 deductible and a \$1,260 annual premium.

Plan D has a \$1000 deductible and a \$657 annual premium.

Plan E has a \$1250 deductible and a \$640 annual premium.

The out-of-pocket maximum for each plan is \$3,000. These plans cover costs after the deductible is met apart from a modest co-pay and co-insurance (identical across plans).

Suppose that you must choose a health plan from these options.

Plan A has a \$100 deductible and a \$2,325 annual premium.

Plan B has a \$350 deductible and a \$1,912 annual premium.

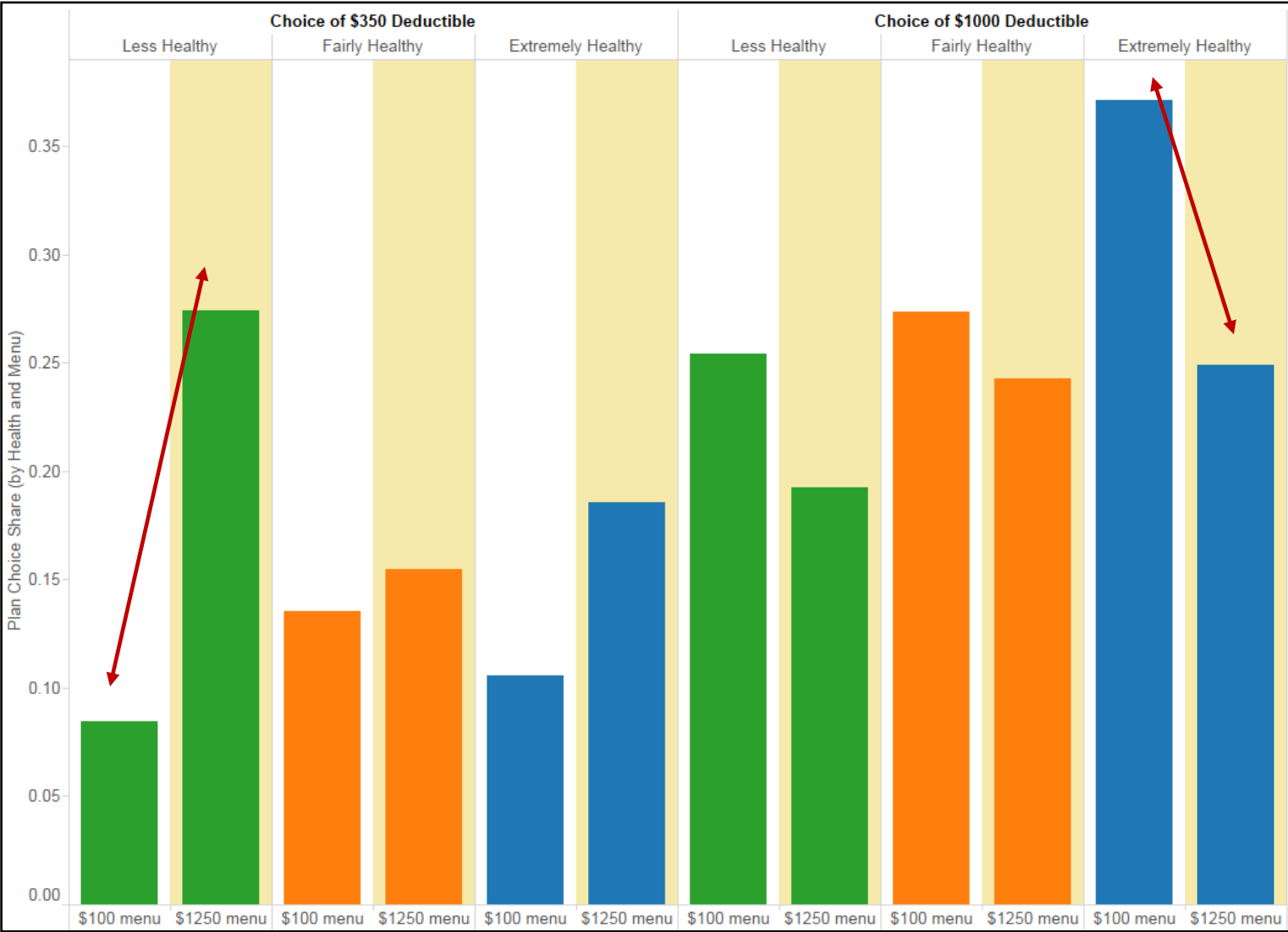
Plan C has a \$500 deductible and a \$1,378 annual premium.

Plan D has a \$750 deductible and a \$1,260 annual premium.

Plan E has a \$1000 deductible and a \$657 annual premium.

The out-of-pocket maximum for each plan is \$3,000. These plans cover costs after the deductible is met apart from a modest co-pay and co-insurance (identical across plans).

Deductible Choice Sensitive to Irrelevant Context



Choices appear consistent with heuristic choice strategy where individuals select plans based on perceived health and risk-tolerance but not comparison of plan values

(ongoing work with Loewenstein and Sydnor)

Do ACA Exchange Enrollees Make Sensible Choices?

Bhargava, Saurabh, and George Loewenstein, and Shlomo Benartzi. "The Health Exchanges and the Behavioral Economics of Plan Choice" *Under Review*.

What benefit levels would you like to include? ⓘ

Select as many options as you would like to include in your search

 ☐ **Bronze**
23 plans from \$111.71 to \$192.77

 ☐ **Silver**
24 plans from \$149.09 to \$240.53

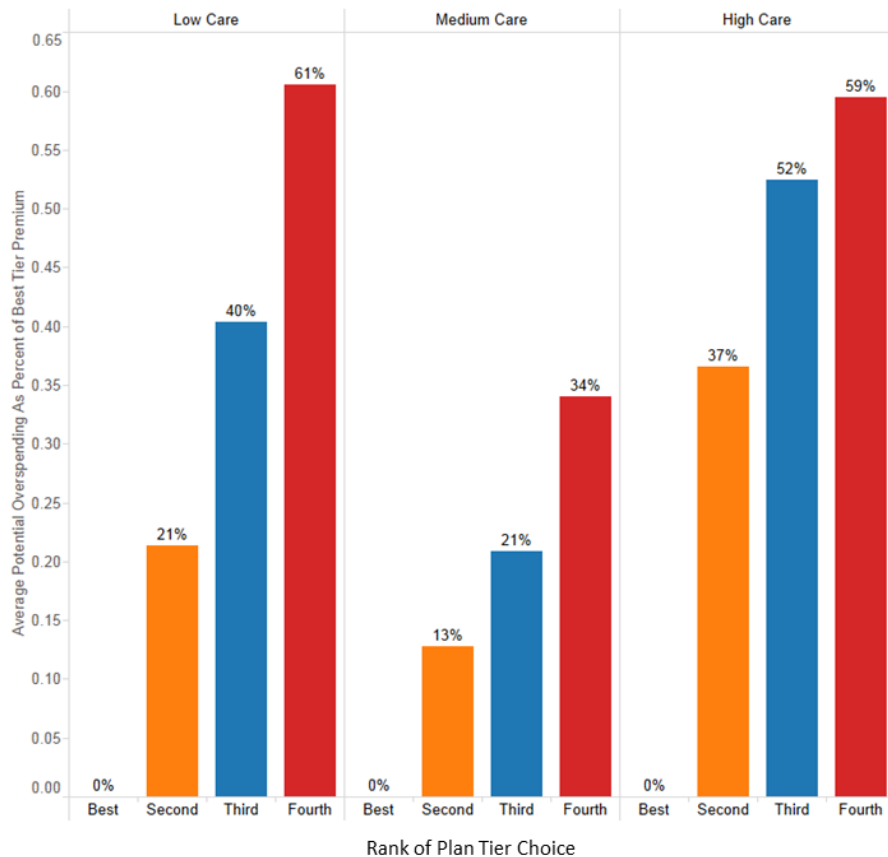
 ☐ **Gold**
14 plans from \$174.06 to \$270.64

 ☐ **Platinum**
5 plans from \$185.89 to \$228.24

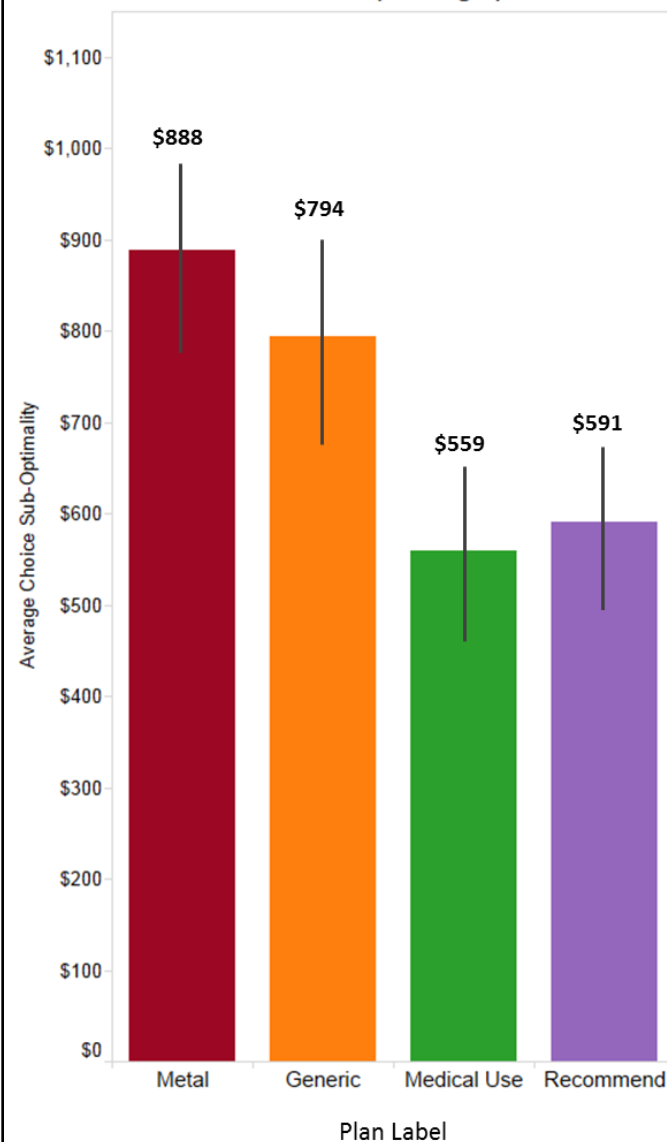


Exchange adopted Metal Labels to help guide plan choice

Panel B. Annual Overspending as a Percent of Best Tier Premium



Panel B: Overspending by Label



**Tier choice is highly financially consequential but Metal Labels
not likely to lead to better choices**

(Behavioral) Policy Tools for a Complex World

Bhargava, Saurabh, and George Loewenstein. “Behavioral Economics and Public Policy 102: Beyond Nudging” American Economic Review, Papers & Proceedings, Vol. 105, No. 5, pp. 396-401, 2015.

- **Health Plan choices are growing in complexity – like other financial choices**
- **May be limits to informational disclosures, marketing interventions, and education**
- **Perhaps we should move beyond traditional nudges and marketing:**
 - Customized actuarially-based recommendations
 - Restrict choice menus to those appropriate for each individual
 - Simplify the actual incentives that underlie insurance

Fundamental simplification not only likely to lead to better choice but better utilization and greater provider competition

Thank you

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