Standard Model
Underlying Consumer Choice

• In the standard economic model of consumer choice, individuals are characterized as “... lightning quick calculators of pleasure and pain.”

• Built on very strong behavioral assumptions:
  – Rationality
  – Full information on attributes of commodities and their substitutes.
  – Easy to assess the benefits & costs of consumption alternatives.
  – Individuals are constrained by a budget.
  – More choice is welfare enhancing.

• These assumptions of rationality & full information carry over to the standard or benchmark model of health insurance choice.
Benchmark Model of Health Insurance Choice

• Key assumptions:
  – Individuals are risk averse:
    • Prefer a loss with certainty rather than a gamble with the same expected loss.
    • Will incur a certain loss to obtain an uncertain flow of benefits.
    • Are willing to pay a “risk premium” above an actuarially fair insurance premium.
  – Can accurately assess the *probability* of future losses.
  – Can accurately assess *income losses* from adverse events.
  – Can accurately assess the benefits & costs of purchasing or not purchasing insurance.
Implications from the Standard Model

- Value of the standard model is that it provides testable predictions about health insurance choices:
  - More risk averse individuals will purchase more insurance than those who are less risk averse.
  - Generally, as the probability of a loss increases, individuals will purchase more insurance. However,
    - Individuals will not purchase insurance for very large or very small probabilities of income loss.
  - More insurance is purchased as the expected income loss increases.
  - Less Insurance is purchased as its “price” increases.
The Standard Model Confronts Reality

- In reality, health insurance choices are complex:
  - Involve comparisons among a variety of plans, benefits, cost-sharing provisions, & carriers.

- Individuals may not always make optimal health insurance choices:
  - May fail to enroll in insurance when it is free or heavily subsidized.
  - May purchase the “wrong” amount of coverage.
  - May cancel a policy when no loss has occurred.
  - May seek to purchase coverage after an event occurs.

- Why???
  - Not solely due to lack of information regarding plan benefits & costs.
  - May reflect psychological impediments to efficient health plan choice.

- Turn to behavioral economic analysis for insights.
What is Behavioral Economics?

- Applies insights from psychology to help explain actual economic behavior.
- Rejects the idea that individuals are rational, fully informed, & perfectly optimizing agents.
  - Recognizes that individuals:
    - Have cognitive limitations and psychological biases.
    - Tend to be present-oriented rather than future-oriented.
    - Will frequently appeal to “heuristics” or “rules of thumb” to make complex decisions.
    - Have preferences that are mutable, evolve over time, and can be manipulated.
    - Will not always make decisions in their best interests.
Key Concepts in Behavioral Economics

- **Bounded rationality:**
  - Individuals have limited cognitive resources & time to evaluate information.

- **Status quo bias:**
  - Individuals prefer the current state of affairs rather than a change in circumstances.

- **Choice overload/decision fatigue:**
  - When confronted with a large array of choices they become mentally fatigued & may avoid making any choice.

- **Heuristics:**
  - Individuals will use “rules of thumb” or “mental shortcuts” to make decisions rather than fully considering available information.

- **Loss aversion:**
  - Individuals are more sensitive to losses rather than gains even if they engage in risky behavior.
  - More motivated to avoid losses than to secure gains.

- **Procrastination:**
  - Individuals have limited self control when they commit to a course of action at a specific date.
Key Concepts in Behavioral Economics (continued)

- **Present-oriented:**
  - Individuals are myopic, valuing the present over the future.

- **Framing:**
  - Individuals make choices based upon how the selection issue is stated.

- **Anchoring:**
  - Individuals make estimates based on some convenient number at hand.

- **Availability bias:**
  - Individuals assess the likelihood of risk based on the occurrence of recent events.

- **Representativeness:**
  - Individuals assess situations by comparing to some stereotype.

- **Optimism & overconfidence:**
  - Individuals tend to be unrealistically optimistic even when the risks are high.

- **Saliency/ignoring important attributes:**
  - Focus on most important attribute of choice when presenting information.
Applying Behavioral Economics to Health Insurance Issues

- Why do some eligible individuals fail to enroll even when health insurance is “free” or heavily subsidized?
  - Optimism and over-confidence regarding risks.
  - Present orientation.
  - Status quo bias.
  - Will procrastinate until ill.
  - How the issue is framed (e.g., certain loss for uncertain future gain).
    - Examples:
      - Under-enrollment in Medicaid & CHIP.
      - Failure to enroll in affordable employer-sponsored health insurance.

- Why are some individuals reluctant to buy high deductible health plans?
  - Myopic loss aversion: individuals consider losses to be more important than gains.
    - Examples:
      - Medigap plans covering part B deductible.
      - Purchase of expensive “Cadillac” health plans.
Applying Behavioral Economics to Health Insurance Issues (continued)

• Why do some individuals purchase “inappropriate” amounts of coverage?
  – Choice overload & decision fatigue.
  – Failure of sponsor to emphasize salient information.
  – Uncertainty about costs & benefits of coverage.
    • Examples:
      – Individual market coverage
      – Medicare Advantage Plans
      – Medicare part D
      – Retiree health coverage

• Why do some individuals remain in the same health plan even when costs, benefits, and personal circumstances change?
  – Status quo bias.
  – Procrastination.
Behavioral Economics & Rationale for Policy Intervention

• Conventional justification for public policy intervention:
  – Rational individuals do not recognize the full social costs and benefits of their actions.
  – Solutions to such “market failures” rely upon taxes or subsidies to achieve optional behavior.

• The assumption of rationality is compromised when cognitive limitations & psychological biases lead to choices that are both privately & socially inefficient.
  – Standard tax or subsidy solutions to market failure may not be successful in changing behavior.
Behavioral Economics and Public Policy:
Improving Health Insurance Choice

• If psychological biases impede optimal health plan choice, public policy can address this “behavioral market failure.”
  – Take steps to align behaviors with the choices of fully-informed individuals would make.

• Policy can design the “choice architecture” so as to **nudge** individuals to alter their choice behavior.

• Nudges are efforts to move individuals in directions that will improve their welfare & thus improve social welfare.

• Nudges can be used in two types of situations:
  – When individuals fail to execute their intended preferences.
  – When individuals have difficulties evaluating the costs & benefits of alternative choices.
Behavioral Economics & Rationale for Public Policy Intervention

• When individuals fail to execute their preferences:
  – May reflect present bias, inattention, complexity of task, or temptation.
  – Approach:
    • Simplify the choice set and application process
      – Reduce the number of options
      – Provide decision aids (e.g., Medicare Part D Plan Finder)
      – Standardize choice options (e.g., Medigap insurance)
      – Provide personalized information specific to the choice context
      – Use reminders targeted at particular groups
      – Auto-enrollment with opt-out provisions
      – Provide feedback
      – Employ commitment devices & planning aids
## Example: Personalized Information

<table>
<thead>
<tr>
<th></th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plan 1</td>
<td>Plan 2</td>
</tr>
<tr>
<td>Premium/year</td>
<td>$18,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>Annual deductible</td>
<td>$250</td>
<td>$500</td>
</tr>
<tr>
<td>Estimated cost to you (premium + out-of-pocket expenses)</td>
<td>At least $18,250</td>
<td>At least $12,500</td>
</tr>
<tr>
<td>Your plan</td>
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<td>$250</td>
</tr>
<tr>
<td>Enrollees like you (on average)</td>
<td>$15,000</td>
<td>$350</td>
</tr>
</tbody>
</table>

*Assumes individual meets deductible.*
Behavioral Economics & Rationale for Public Policy Intervention

• Help individuals evaluate the benefits & costs of alternative choices:
  – Change how the choice is framed.
    • Emphasize gains rather than losses.
    • Alter the order in which health plan options are presented.
    • Use of social comparisons & social norms:
      – Provide individuals with information on their own insurance benefits & costs relative to others in the community.
  – Provide information on risks & consequences using concrete examples:
    • Magnitude of potential loss and realistic probability of incurring loss in the future.
    • The consequences of going without health insurance.
    • Extend the time frame characterizing the likelihood of adverse event:
      – E.g., lifetime risk versus annual risk.
Behavioral Economics & Rationale for Public Policy Intervention

• Help individuals evaluate the benefits & costs of alternative choices (continued):
  – Discourage individuals from purchasing low deductible health plans:
    • Provide information on the relatively small expected benefits of low deductible plans relative to the additional plan costs.
    • Make high deductible plan the “default option” among health plan choices.
  – Enhance health plan literacy.
When Nudges Fail . . .

• Mandates may be necessary:
  – Require individuals to obtain policies to cover risks that they would desire to avoid if they were well-informed but fail to act on given current understanding:
    • Avoid free-rider problem.
      – Individuals contribute toward the provision of specific benefits.
    • Avoid problem of adverse selection.
  – However:
    • May be politically risky.
    • How will penalties be structured?
    • Will salient & immediate penalties address issues of procrastination?
Nudges & the Affordable Care Act

• The ACA draws upon behavioral economic “nudges” to enhance health plan choice:
  – Actuarial values for “metal-level” health plans.
  – Standardized essential benefits within states.
  – Standardized information on plans to consumers.
  – Use of “navigators” to assist with coverage choice.
  – Auto-enrollment in coverage for workers in firms with more than 200 employees.
    • Includes opt-out provision.
  – Use of subsidy calculators to inform consumers of net cost of exchange coverage.
Summing Up

- Behavioral economics challenges the assumption of a rational & fully informed consumer.

- Behavioral economics recognizes that individuals have cognitive limitations and psychological biases that can lead to both privately and socially inefficient consumer choice.

- Behavioral economics provides a justification for interventions to address such “behavioral market failures.”
  - When individuals fail to execute their intended preferences.
  - When individuals have difficulties evaluating the costs & benefits of alternative choices.

- However, “nudges” may not always work and may require a mandated approach.

- Several provisions of the Affordable Care Act reflect the influence of behavioral economics.
Sources


