Curing What Ails Us: How the Lessons of Behavioral Economics Can Improve Health Care Markets

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INTRODUCTION

The Supreme Court's decision to consider the constitutionality of the Patient Protection and Affordable Care Act (Affordable Care Act or ACA) has catapulted the policy debate over health care into a new chapter fraught with profound questions about the nature of American federalism. Even as the constitutional debate takes center stage, it is worth remembering that the Obama Administration chose to frame its reform bill as a practical solution to the country's mounting fiscal challenges. As policy makers begin building the administrative machinery that will give life to the Affordable Care Act, it is worth evaluating their efforts with the law's fiscal goals in mind. The White House framed its arguments in favor of health care reform by insisting that effective control of the nation's ballooning deficit would be impossible without reining in skyrocketing health care costs. Peter Orszag, head of the White House Office of Management and Budget from January 2009 through July 2010, spent nearly the entirety of his term as director of the Congressional Budget Office fine-tuning the "health reform is deficit reform" argument. As Orszag argued in testimony before the Senate Finance Committee, "The rate at which health care costs grow relative to national income—rather than the aging of the popula-


3. See, e.g., Lori Montgomery, Deficit Projected To Soar with New Programs, WASH. POST (Aug. 26, 2009), http://www.washingtonpost.com/wp-dyn/content/story/2009/08/25/ST2009082501309.html ("Orszag said the president will press forward on health care despite the yawning budget gap, arguing that reform is essential to reining in the skyrocketing costs of government programs such as Medicare and Medicaid, which threaten to drive deficits even higher as the baby-boom generation retires.").

tion—will be the most important determinant of future federal spending.”5 U.S. health care costs now constitute a share of our gross domestic product (GDP) that is 7.9 percentage points higher than the average for other countries in the Organization for Economic Cooperation and Development.6 The ability of health care reformers to effectively control costs will be one of the central public-policy challenges of the coming decade.

Thus, one of the primary goals of the ACA’s implementers will be to create a health care system that encourages consumers to make more prudent choices while driving doctors and insurers to provide health care more efficiently. In this ongoing project, the insights of behavioral economics will be crucial. While traditional economic models treat health care as a simple consumption good, about which rational consumers can efficiently make reasoned decisions in light of their preferences, a wide range of empirical studies demonstrates that health care markets are vulnerable to a panoply of market failures. Behavioral economics can help explain some of these failures while suggesting more efficient structures for future health care markets.

This Note proceeds in two parts. In Part I, I review the behavioral economics literature and develop two key themes that should inform policy makers’ thinking about efficient health care markets. In Part II, I apply these themes to three prongs of the ACA and outline ways in which the teachings of behavioral economics can make implementation of the ACA a more effective public-policy endeavor.

The Supreme Court’s recent decision to uphold the constitutionality of the ACA7 sets the stage for a new national conversation about how policy makers implement the law. As signed into law, the ACA expanded Medicaid to require states to provide full health care coverage for all individuals with incomes below 133 percent of the federal poverty line by 2014.8 States refusing to cooperate would risk losing their Medicaid funding in its entirety.9 The Court found that the ACA’s provisions expanding Medicaid10 violated the Constitution’s Spend-
ing Clause by, in effect, forcing states to accept a new program to provide a “comprehensive national plan to provide universal health insurance coverage” whereas, before, Medicaid was merely a program “to care for the neediest among us.” Rather than strike down the Medicaid expansion sections of the law in their entirety, however, the Court ruled that states must now be able to choose, without jeopardizing their current Medicaid funding, whether or not to accept new funds for Medicaid expansion moving forward. Governors have already begun announcing their intention not to accept the Medicaid expansion provision. The next few years are thus ripe for an experiment in federalism on a massive scale as states not only implement the ACA but also decide whether to accept new Medicaid funding as well. The aim of this Note is to analyze how the teachings of behavioral economics can provide practical advice to state and federal policy makers as they make these decisions.

I. Behavioral Economics and Health Care Reform: Key Themes

The policy debate over health care reform tends to pit two worthwhile goals, expanded access to health care and aggressive efforts at cost containment, against each other. The ACA is ambitious in its attempt to accomplish both of these goals simultaneously. On the immediate coverage side, the ACA creates short-term, high-risk pools for adults with preexisting conditions who would otherwise be unable to obtain insurance. States have the option of either administering their own high-risk pools with substantial federal assistance or allowing the Department of Health and Human Services (HHS) to administer the pools on their behalf. In 2014, individuals will then be able to transfer out of the high-risk pools into insurance plans that can no longer discriminate on the

caid enrollees must receive); § 1396d(y)(1) (describing how the Medicaid expansion is to be funded).
11. U.S. Const. art. I, § 8, cl. I (granting Congress the power to “pay the Debts and provide for the .. general Welfare of the United States”).
13. Id. at 2607-2608.
basis of preexisting conditions.\textsuperscript{17} Also beginning in 2014, the ACA creates a series of health care exchanges, or marketplaces, in which consumers not covered by an employer-based insurance plan can select individual-coverage options from a “one-stop shop” of approved plans.\textsuperscript{18} Individuals and families with gross incomes up to 400% of the poverty level will receive subsidies to assist them in purchasing insurance.\textsuperscript{19} Meanwhile, the ACA’s individual-mandate provision will require individuals to purchase insurance or face a tax penalty beginning in 2014.\textsuperscript{20}

With respect to cost containment, the ACA contains a host of provisions seeking to decrease the growth rate in health care costs—that is, to “bend the cost curve.”\textsuperscript{21} One provision in particular is ripe for closer examination through the lens of behavioral economics. As of 2013, the provision creates an Independent Payment Advisory Board (IPAB) whose mission is to limit the growth rate in Medicare spending.\textsuperscript{22} If Medicare spending exceeds certain defined targets, IPAB has the authority to make recommendations for cost containment to Congress for fast-track consideration.\textsuperscript{23}

Policy makers must implement these reforms in the context of extraordinary uncertainty about which interventions will actually help control health care costs. Some areas, like the administrative apparatus underlying health care delivery, seem ripe for reform. According to the McKinsey Global Institute, the public-policy branch of the McKinsey consulting firm, the United States spends $91 billion more on health administration and insurance than McKinsey’s anal-

\begin{itemize}
  \item 17. \textit{Id.}
  \item 19. ACA § 1401 (delineating tax credits).
  \item 20. \textit{Id.} § 1501 (describing the individual mandate as a “[r]equirement to maintain minimum essential coverage”).
  \item 22. ACA § 10320.
\end{itemize}
ysis suggests is commensurate with the country's wealth. On the other hand, there is not a scholarly consensus on whether it is possible to bend the cost curve at all. Pessimists point to historical data that indicate that the relationship between U.S. GDP per capita and national health care expenditures per capita has been practically one-to-one for as long as there are data available. In other words, national wealth and health care spending increase in a constant, monotonic relationship. This might suggest that Americans are simply predisposed to enjoy high spending on health care as a consumption good and that, short of a drastic change in national preferences, the cost curve will remain inelastic.

A recent example illustrates just how elusive real cost containment can be. Many health care reformers, including President Obama, have long argued that the adoption of electronic medical records will eliminate wasteful reliance on failure-prone paper records and lead to tangible health care savings. Recent research, however, indicates precisely the opposite result: The adoption of electronic medical records increases health care spending because doctors using digital records are more likely to order expensive diagnostic tests (possibly because digital technology makes ordering such tests easier). This example underscores just how difficult it is to know whether cost-oriented reforms will be effective.

On the other hand, there are reasons to believe that health care markets can become more efficient. Data from the Center for Medicare and Medicaid Services demonstrate that there is little relationship nationwide between outcome measures of health care quality (outputs) and health care spending (inputs). Using data from the Dartmouth Atlas Project, researchers have divided the country into 306 Hospital Referral Regions, most of which are slightly larger


than counties and occasionally cross state boundaries. Each Hospital Referral Region reports data on spending and health care outcomes. There are two key takeaways from the data. First, there is no obvious relationship between per capita health care spending and quality of care. Second, comparisons between high-spending areas and low-spending areas could reveal a path to health care savings. Dartmouth Atlas researchers have concluded that nationwide health care expenditures could be slashed by 29% if spending in medium and high-cost areas could be brought in line with spending in low-cost areas.

What accounts for the regional variation in health care spending? Atul Gawande, a professor at Harvard Medical School, visited McAllen, Texas—a Hospital Referral Region with some of the highest medical expenses in the country—in order to answer that question. His conclusion, after interviewing patients, doctors, and insurance providers, was that the difference between McAllen and more efficient communities is not a function of administrative overhead, cost of treatment, or the underlying health of the population. Rather, Gawande concluded that the medical community in McAllen had gradually embraced an ethic of over-treatment, over-charging, and over-reimbursement. As Gawande put it, "Health-care costs ultimately arise from the accumulation of individual decisions doctors make about which services and treatments to order. The most expensive piece of medical equipment, as the saying goes, is a doctor's pen."

Behavioral economics can be a useful framework to explain these findings and to analyze health care policy options in light of them. The key lesson of behavioral economics is that human actors often respond to incentives in surprising and counterintuitive ways. Insofar as health care reformers are able to design systems that channel and respond to those idiosyncrasies, the lessons of behavioral economics will prove crucial to controlling costs while expanding coverage. Reviewing both the behavioral economics literature and research in the health care economics field, the remainder of this Part identifies two key themes of behavioral economics that illustrate how its teachings can lead to better health care policy. First, consumers' abilities to make "rational" choices are predictably constrained, especially in situations involving complex calculations.


31. Id. at 4.


33. Id.
and probabilistic trade-offs. Second, principal-agent dynamics in health care markets can further frustrate efficient health care consumption choices.

A. Theme 1: Bounded Rationality and the Need for Simplicity

At a fundamental level, policy makers must grapple with the extent to which individuals are able to make sensible health care choices. If health care markets were efficient, then consumers would always make choices that maximize their utility. In this world, policy interventions should focus solely on reducing mundane barriers to efficiency, such as decreasing information and transaction costs. Alternatively, we may live in a world in which consumers make systematically suboptimal choices about health care and insurance. This Section advances the argument that individuals do in fact struggle to make probabilistic decisions of the kind necessary to make efficient health care choices.

1. The Probability Problem and Health Care Consumption Choices

The traditional efficient market model of consumer behavior posits that a rational purchaser, cognizant of her preferences and with perfect information about her options in the marketplace, will efficiently allocate her resources in a way that best accommodates those preferences. The findings of behavioral economics, however, demonstrate that this model fundamentally breaks down when it comes to health care consumption.

First, it is helpful to have a framework for analyzing how individuals make health care decisions. Michael Grossman, one of the pioneers in the field of health economics, developed an economic model for analyzing the various factors that contribute to individual health outcomes. His model presumes that an individual's health depends on three baskets of variables: genetic makeup, certain environmental factors, and independent decisions regarding resource allocation. An individual's health-related decisions will, in turn, vary depending on human capital (including education level and socioeconomic status), expenditure decisions, and choices regarding lifestyle and well-being. Research


36. Id. at 224-25.

regarding bounded rationality directs us to examine the quality of expenditure decisions—specifically, whether individuals have the cognitive capacity to accurately assess different health care consumption options and make rational choices regarding their personal health care.

An explanatory note is in order. Here, I use the term “rational” to indicate health care decisions that (1) correctly capture an individual’s preferences and (2) best maximize future utility in light of present information. The “rationality” problem thus has two facets. First, consumers may have difficulty identifying their own preferences, especially when weighing complex, probabilistic choices. Second, consumers may misperceive which choices maximize future utility. This occurs because consumers minimize the future costs of present decisions. Such miscalculations can run the gamut from engaging in risky behaviors, such as smoking or overeating, to failing to adequately insure against negative future health outcomes.

Understanding the ability of individuals to make rational health care decisions is absolutely central to the health reform debate. Republican opponents of the ACA, for example, have proposed a complete overhaul of the Medicare system. Under one plan, individuals would receive vouchers that would allow them to make more health care consumption choices on their own.38 Knowing the extent to which consumers are rationally able to weigh the costs and benefits of health care options is key to evaluating the viability of this proposal.

The data indicate that increased reliance on consumer decision making is deeply problematic. Decisions about health care consumption are largely about insurance and are therefore fundamentally probabilistic.39 A consumer must weigh the cost of a present expenditure against the possibility of future illness or medical catastrophe.40 The behavioral economics literature highlights that people are terrible decision makers when it comes to these types of calculations. Amos Tversky and Daniel Kahneman, two of the founders of behavioral economics, have convincingly demonstrated that probability-related decisions are subject to a wide variety of biases.41 Three in particular merit further discussion here: the representativeness heuristic, pseudocertainty, and optimism bias.

The representativeness heuristic involves making probabilistic judgments about the relationship between two events or processes. In assessing whether “object A belongs to class B,” or whether “event A originates from process B,” Tversky and Kahneman observe that “probabilities are evaluated by the degree to which A resembles B.”42 In other words, in a collision between probabilistic

39. Richman, supra note 37, at 722.
40. Id.
42. Id. at 1124.
thinking and reliance on simple stereotypes, people often use stereotypical thinking. In one evocative example from a related solo research endeavor, Kahneman provided the following description to their research subjects:

Linda is 31 years old, single, outspoken and very bright. She majored in philosophy. As a student she was deeply concerned with issues of discrimination and social justice and also participated in antinuclear demonstrations.43

When presented with various possible descriptions of Linda's professional life, 85% of research subjects indicated that it was more likely that "Linda is a bank teller and active in the feminist movement" than that "Linda is a bank teller." This result is illogical: There must be fewer feminist bank tellers in the world than bank tellers. Individuals, however, associate the description of Linda with a stereotypical feminist and react accordingly. Tversky and Kahneman refer to this feature of the representativeness heuristic as the "conjunction fallacy."44

In one sense, this result is unsurprising. The fact that people make probabilistic judgments based on stereotypes is intuitive. Critically, however, use of the representativeness heuristic also leads to systematic errors in the way people process probability-related information. First, people tend to ignore "base rate" information when assessing probability-related outcomes. In another experiment, Tversky and Kahneman told their research subjects that 70% of people in the hypothetical were engineers and 30% were lawyers. When provided with just this information, subjects tended to guess that an unknown individual was an engineer or a lawyer at rates of 0.7 and 0.3, respectively.45 When provided with a neutral personality description,46 however, those probabilities shifted to 0.5. In other words, people overreact to what Tversky and Kahneman call "worthless evidence."47 A more formal way to describe this phenomenon is to say that people are poor Bayesian updaters,48 by which economists mean that people are not

44. Id. (summarizing findings); see Amos Tversky & Daniel Kahneman, Extensional Versus Intuitive Reasoning: The Conjunction Fallacy in Probability Judgment, 4 PSYCHOL. REV. 295 (1983).
45. Tversky & Kahneman, supra note 41, at 1125.
46. For example, "Dick is a 30 year old man. He is married with no children. A man of high ability and high motivation, he promises to be quite successful in his field. He is well liked by his colleagues." Id. This description is intended to provide no information on the relative probability that Dick is an engineer or a lawyer.
47. Id.
48. For a description of rational Bayesian behavior, see Lara J. Wolfson, Joseph B. Kadane & Mitchell J. Small, Bayesian Environmental Policy Decisions: Two Case Studies, 6 ECOLOGICAL APPLICATIONS 1056, 1057 (1996) ("The decision maker, when behaving as a rational Bayesian, would ... choose the decision that, based on his or her prior beliefs, updated by collected data, is likely to have the least adversarial consequences when compared to other possible decisions.").
especially skillful at integrating new probabilistic information into their predictions. Economist David Grether, in an experiment designed to test the robustness of Tversky and Kahneman’s findings, found some empirical evidence to suggest that individuals become more confident and precise at Bayesian updating as they gain experience manipulating probabilities in similar situations.\footnote{49} This fact provides little comfort in the health care context, however, where individuals purchase insurance to hedge against illnesses or injuries that are unlikely. In other words, Bayesian learning involves manipulating two pieces of information: a prior probability based on previous information and a posterior probability based on newly acquired evidence.\footnote{50} The lure of the representativeness heuristic, however, leads people to neglect base rates (prior probabilities) and overinterpret new evidence. Because many health care decisions are “single-shot” processes that are unlikely to repeat themselves, the structure of the “insurance-purchasing game” does not lend itself to effective Bayesian learning.

A second systemic error in manipulating probabilities is “pseudocertainty.” As Tversky and Kahneman demonstrate, pseudocertainty is the gravitation toward outcomes that appear to minimize variability but are in fact subject to conditions that make this certainty illusory.\footnote{51} To demonstrate the power of the pseudocertainty phenomenon, Tversky and Kahneman presented a series of cancer diagnosis-and-treatment scenarios to a group of seventy-two physicians and asked the physicians to select their preferred treatment.\footnote{52} The scenarios were as follows, with the percentage of physicians who chose the specific treatment appearing in brackets:

\begin{itemize}
  \item \textit{Case 1}\n  \begin{itemize}
    \item Treatment A: 20\% chance of imminent death and 80\% chance of normal life, with an expected longevity of 30 years. [35\%]
    \item Treatment B: certainty of a normal life, with an expected longevity of 18 years. [65\%]
  \end{itemize}

  \item \textit{Case 2}\n  \begin{itemize}
    \item Treatment C: 80\% chance of imminent death and 20\% chance of normal life, with an expected longevity of 30 years. [68\%]
    \item Treatment D: 75\% chance of imminent death and 25\% chance of normal life, with an expected longevity of 18 years. [32\%]
  \end{itemize}
\end{itemize}

\footnote{49. David M. Grether, \textit{Bayes’ Rule as a Descriptive Model: The Representativeness Heuristic}, 95 Q.J. Econ. 537, 553-55 (1980).}
\footnote{50. Grether models this process mathematically. \textit{Id.} at 547-49.}
\footnote{52. \textit{Id.} at S269.}
Consider a new case where there is a 25% chance that the tumor is treatable and a 75% chance that it is not. If the tumor is not treatable, death is imminent. If the tumor is treatable, the outcomes of the treatment are as follows:

- Treatment E: 20% chance of imminent death and 80% chance of normal life, with an expected longevity of 30 years. [32%]
- Treatment F: certainty of normal life, with an expected longevity of 18 years. [68%]

The physician response rates to these scenarios illustrate several impulses in the way people respond to probabilistic information. With respect to Case 1, the physicians made a risk-averse choice by choosing a certain outcome with a lower expected lifetime (18 years in treatment B versus 24 years in treatment A). With respect to Case 2, because imminent death is likely in either instance, the physicians gravitated toward the treatment offering the greatest expected life (6 years in treatment C versus 4.5 years in treatment D). Doctors' preferences with respect to Case 3, however, are somewhat surprising and demonstrate the pseudocertainty phenomenon. As Tversky and Kahneman point out, the popularity of Treatment F rests on the fact that it appears to ensure survival, despite the fact that this result is conditional on the treatability of the tumor. When this underlying condition is considered, the actual likelihood of survival under Treatment F is only 25%. In fact, the conditional probability renders the expected life outcomes of Treatments E and F identical to those of Treatment C and D (6 years and 4.5 years, respectively). Because of the way the conditional probabilities were framed, however, physicians gravitated toward the option that provided pseudocertainty rather than considering the relevant prior probabilities.

These two phenomena—reliance on the representative heuristic and gravitation toward pseudocertainty—suggest that health care consumers are poorly equipped to make independent, rational health care consumption choices. As discussed above, efficient health care decisions are inherently probabilistic. But the use of representative thinking demonstrates that consumers are poor Bayesian learners who have difficulty integrating new probabilistic data into their existing knowledge. Further, the pull of pseudocertainty suggests that framing devices and other messaging techniques further complicate probabilistic decision making.

53. Id.
54. Id.
55. Id.
Unfortunately, health care decisions are even more complex and error-prone than reliance on these heuristics might suggest. As economists Jeffrey Liebman and Richard Zeckhauser argue, "To figure out which health insurance choice maximizes expected utility, one needs to know the probabilities, financial costs, and health-related utilities associated with each possible state of the world. Securing knowledge of any of these components is problematic." Moreover, the doctor-patient relationship can compound these difficulties. As Subsection I.B.1 of this Note describes, patients rely on physicians to provide them with critical health care information and to make treatment decisions in their best interests. That is, patients (principals) outsource health care decision making to their doctors (agents). The dynamics of the principal-agent relationship between doctor and patient, however, can frustrate doctors' ability to communicate with patients and patients' ability to trust that their physicians are acting in their best interests.

As if these challenges to processing and manipulating probabilistic information were not problematic enough, consumers are also subject to a wide array of optimism bias—that is, the "mistaken belief that one's chances of experiencing a negative event are lower (or a positive event higher) than that of one's peers." This has obvious implications for health care markets in which consumers make consumption choices based on the likelihood of suffering some future adverse health outcome. As psychologist William Klein explains, "[I]f people underestimate their risk of experiencing a negative health outcome, they will be less likely to take precautions to prevent that outcome from occurring." Optimism bias also has the effect of leading people to underestimate the harmful consequences of risky behavior, such as smoking or binge drinking. Moreover, optimism biases are reinforced through social-feedback loops. Researchers have identified a "false consensus effect" whereby individuals rationalize their behavior by adopting the belief that their peers engage in similar ac-

58. Id. at 3.
Individually engaged in risky behaviors, like smoking, tend to overestimate the proportion of their cohort that engages in similar conduct. This false perception can lead to a situation in which "inflation of the real consensus may serve to reinforce practices and modes of conduct that increase the probability of illness or injury."

From the perspective of the health production function, optimism bias thus severely skews the trade-off between present expenditures and future utility. Moreover, these departures from the model of the perfectly rational consumer do not occur in a vacuum. Instead, they are layered on top of misleading or incorrect mathematical intuitions. These mistakes include basic misconceptions regarding chance and poor intuitions regarding regression toward the mean.

Regression toward the mean is shorthand for the fact that in most distributions the majority of possible outcomes cluster near the average. A standard normal distribution, with most observations clustered around the mean, is the most obvious example. As a consequence, the observation of any extreme value will most likely be followed by a value closer to the average. This tends to scramble our normal intuitions regarding cause and effect: Individuals will want to create an explanation for the observed "change" rather than realize they are simply observing the statistical reality that average outcomes are more likely than extreme ones. Even experienced statisticians sometimes fall into this analytical trap. In one infamous example, Horace Secrist’s 1933 book *The Triumph of Mediocrity in Business* offered reams of data to advance the conclusion that poorly performing businesses will tend to improve over time while outstanding firms will tend to decline. Far from a novel conclusion, Secrist just described an obvious statistical phenomenon. One can easily see how this kind of misapprehension could affect health care consumption. A patient experiencing a particularly severe medical episode (such as a flu) followed by a less alarming sickness (such as a mild cold) could mistakenly conclude that some preventative measure or change in behavior was effective at warding off severe illness, when instead it turns out that severe illnesses are simply rare.

In addition to misleading intuitions about cause and effect, consumers may also have difficulty predicting the way in which present choices will affect future

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62. *Id.* at 74.

63. *Id.* at 77.

64. Tversky & Kahneman, *supra* note 41, at 1125.

65. *Id.* at 1126-27.


happiness. Humans are prone to a wide range of "consumption errors"—that is, misperceiving the expected utility from a future action and thus behaving in a way that leads to the misallocation of resources. This observation applies in a wide variety of contexts. In one study, researchers found that consumers are terrible judges of future utility when it comes to the psychological costs of long commutes, consistently overvaluing the benefits of living far from their places of work (such as more housing square footage in the suburbs) and undervaluing the cost of commuting (such as time spent on the road and in traffic). In the health care context, individuals may underperceive the costs of future setbacks. This suggests that people may fail to take appropriate steps to avoid or insure against such outcomes.

In short, people are simply not adept at the kind of probabilistic thinking that would facilitate the development of a "rational" health care market where individuals are able to maximize utility in line with their preferences. Instead, people are generally overly optimistic about their health. Reliance on representative thinking makes it difficult to integrate new information into health care choices. Finally, gravitation toward pseudocertain outcomes makes people susceptible to various framing effects. Even physicians may gravitate toward treatments that promise the illusion of more certain outcomes. Poor statistical intuitions further exacerbate these challenges. Facing these barriers, consumers will have difficulty making health care consumption choices in ways that maximize future happiness.

2. Policy Challenges in a Near-Universal Health Care System

The introduction of a near-universal health care system, such as that enacted by the ACA, addresses some of the policy challenges relating to bounded

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70. Stutzer & Frey, supra note 68, at 19.

71. Tversky & Kahneman, supra note 51, at 269.

72. I use the term "near-universal" to distinguish the subsidy and mandate mechanism of the ACA from a true, universal health care plan along the lines of the British National Health Service. According to the Robert Wood Johnson Foundation, while the ACA will more than halve the uninsured proportion of the population, some 23 million are expected to remain uninsured. Among non-elderly adults, approximately 37% are expected to be eligible for insurance programs but not take advantage of them (presumably violating the individual mandate provision), while 25% are estimated to be undocumented immigrants. MATTHEW BUETTGENS
rationality and leaves others unresolved. Here, I use the term "bounded rationality" as shorthand for the myriad biases and misjudgments discussed above that frustrate one's ability to make choices that maximize utility.\footnote{See Kahneman, supra note 43, at 1449 ("Our research attempted to obtain a map of bounded rationality, by exploring the systematic biases that separate the beliefs that people have and the choices they make from the optimal beliefs and choices assumed in rational-agent models.").}

Near-universal health care systems are often successful in significantly reducing the problem of underconsumption of low-cost, preventative health care. As the discussion in Subsection I.A.1 illustrates, however, consumers may systematically undervalue present expenditures that result in greater health-related utility in the future. Initial evidence from the Massachusetts experiment with universal coverage reveals that more than 97\% of state residents are now insured.\footnote{Stan Dorn, Ian Hill & Sarah Hogan, Robert Wood Johnson Found., The Secrets of Massachusetts' Success: Why 97 Percent of State Residents Have Health Coverage 2 (2009), available at http://www.shadac.org/files/shadac/publications/SecretsOfMassSuccessLongPaper.pdf.} This statistic indicates that compelled participation in insurance markets alleviates some concerns about underconsumption. If anything, Massachusetts now appears to be experiencing a shortage in certain kinds of medical care providers, such as primary-care physicians, as a result of the increased demand for services.\footnote{See Kevin Sack, In Massachusetts, Universal Coverage Strains Care, N.Y. Times, Apr. 5, 2008, at A1.}

Universal participation in insurance markets, however, highlights another key challenge facing health care reformers: how to create a functioning system for selling a probabilistic good (health insurance) to consumers who have demonstrated a striking lack of facility in making probabilistic decisions. While the individual mandate of the ACA will require individuals to purchase insurance, policy makers will need to make decisions about implementation that steer consumers toward (1) choosing an efficient insurance policy and (2) making rational consumption choices while insured.

The teachings of behavioral economics offer helpful guidance to those seeking to implement the ACA efficiently. I take as a starting point Kahneman's theory that decision making takes place within a two-tiered "architecture of cognition."\footnote{Kahneman, supra note 43, at 1450-52.} In this framework, human cognition occurs within two neural systems. System 1 is intuitive, relying on a series of heuristics, subconscious associations, and mental shortcuts to make quick judgments about how to interpret data. System 2, on the other hand, involves conscious cognition and purposive reasoning to methodically process data according to formulaic rules. On
Kahneman's telling, System 2 largely acts as a monitoring system for System 1. That is, humans operate using System 1 rules until System 2 senses a need to engage in order to make more accurate decisions or to correct for System 1's shortcomings. Kahneman reasons that this arrangement makes adaptive sense:

Since the "operations of System 2 are slower, serial, effortful, and deliberately controlled," the brain tends to use them only when necessary. This is a natural consequence of the fact that "overall capacity for mental effort is limited." The value of this two-tiered typology is that it provides an elegant explanation for the panoply of bounded rationality phenomena. Our brains, Kahneman hypothesizes, are hardwired to direct different tasks to the appropriate system in an effort to handle the reality that the "overall capacity for mental effort is limited." This limited capacity leads to predictably suboptimal decision making in the face of complexity. Some laboratory research on animals indicates that poor decision making in the face of complexity "reflects hardwired cognitive behavior patterns." The discussion of poor probabilistic decision making in the preceding Subsection further highlights the extent to which individuals have difficulty integrating complex information in order to make rational choices.

This reality has profound implications for the way in which we think about the health care marketplace. At the individual level, it suggests that expanding one's set of options—normally assumed to increase utility—may actually have deleterious consequences. Social psychologists refer to this phenomenon as "choice overload," denoting the fact that complexity in decision making can actually decrease satisfaction and motivation. On one level, this is counterintuitive. We tend to think that having more choices is an unalloyed good in that it allows us to satisfy our preferences more precisely. Psychologists Sheena S.

77. Id. at 1454 ("The compound cognitive system that has been sketched here is an impressive computational device. It is well-adapted to its environment and has two ways of adjusting to changes: a short-term process that is flexible and effortful, and a long-term process of skill acquisition that eventually produces highly effective responses at low cost.").

78. Id. at 1451.

79. Id.

80. Id.

81. Liebman & Zeckhauser, supra note 34, at 236.


83. The intuition that abundant information and multiplicity of choice is an obvious social good is a common trope. See, e.g., Virginia v. Hicks, 539 U.S. 113, 119 (2003) (defining the purpose of First Amendment overbreadth doctrine as preventing harm "to society as a whole, which is deprived of an uninhibited marketplace of ideas" when citizens must comply with overbroad speech restrictions).
Lyengar and Mark R. Lepper, however, present empirical evidence that suggests otherwise. They discuss the findings of three experiments that indicate how complexity can decrease satisfaction. In the first experiment, they found that customers who sampled jam at a booth offering just six flavors were more likely to purchase jam than if they had sampled at a booth offering twenty-four flavors. In the second experiment, they presented undergraduate students with either six or thirty topics on which they could write an extra-credit essay. The researchers then measured the students' motivation and the quality of their work product, finding that more students wrote essays when presented with fewer potential topics and that the quality of those essays was slightly better than essays written by students presented with more options. In the third experiment, subjects could choose chocolate from either a display of six or thirty. Participants reported enjoying the selection process more when more options were involved, but also reported feeling more regretful about their ultimate choices. Together, these findings indicate that decision making involving larger option sets can lead to decreased consumer satisfaction and misalignment of consumer preferences.

This kind of "choice overload" can lock consumers into suboptimal health care decisions. For example, consumers are consistently reluctant to change drugs or medical treatments even when prices rise and cheaper substitute goods are available. Two Harvard researchers, Richard G. Frank and Richard J. Zeckhauser, used data from the implementation of Medicare Part D, the program providing additional prescription drug coverage for seniors, to illustrate how this reluctance inhibits rational choices. Medicare Part D offers seniors a standard, government-approved "plain vanilla" option, but seniors can opt instead to choose a regional plan offered by a private provider. In one county in Massachusetts, Frank and Zeckhauser found that a consumer can choose from among forty-seven competing plans, twenty-three of which are substantially identical to the vanilla plan. Despite these plans' substantial similarity, the variance in price is striking: The most expensive plan charges premiums 2.4 times greater than the least expensive plan despite nearly identical coverage. Frank and Zeckhauser's takeaway for health care markets in this setting is stark: "Price competition is not working." Similarly, economists Jason Abaluck and John

84. Lyengar & Lepper, supra note 82, at 996-98.
85. Id. at 998-1000.
86. Id. at 1000-03.
89. Frank & Zeckhauser, supra note 87, at 1135-36.
90. Id. at 1136.
Gruber analyzed a sample of 2.7 million Medicare Part D recipients in terms of the price of the Medicare Part D plans and their health expenditures. They concluded that seniors are failing to act as rational health care consumers in the Medicare Part D market. By defining a utility function based on insurance plans’ premiums, out-of-pocket costs, variance, and quality (in dollar terms), Abaluck and Gruber find that seniors purchase Medicare Part D plans that on average provide 27% less utility than the ideal plan.

These findings highlight challenges in efficient health care consumption at the aggregate level. By way of analogy, research in the consumer protection field has repeatedly demonstrated that, where consumer errors are evident in existing data and therefore predictable, firms will take advantage of the information asymmetry to capture profits without creating value. Consider a telling example from the recent liquidation of Circuit City: The company raised its prices, even while liquidating, because consumer data made clear that purchasers believe they are getting a good deal when a company is going out of business, even when that company raises its prices to take advantage of increased demand. Other research has indicated that in situations that require complex utility calculations, such as purchasing car loans, consumers are either incapable of correctly assessing the relevant trade-offs or fall prey to psychological factors, such as a preference for avoiding losses rather than realizing gains, that have little bearing on the ultimate value of the sought-after good.


92. Id. at 35.


96. See Raymond S. Hartman, Michael J. Doane & Chi-Keung Woo, Consumer Rationality and the Status Quo, 106 Q.J. ECON. 141, 141 (1991) ("[R]ecent empirical analysis suggests . . . that consumers attach 'undue' importance to their current commodity bundle, demonstrating 'apparently irrational' reluctance to switch to alternative bundles. Likewise, as consumers evaluate alternatives, they are found to asymmetrically value the losses and gains derived from changing their status quo.").
Policy makers administering the ACA must remain cognizant of consumers’ apparent inability to make complex insurance-related decisions effectively. Simplicity should be a cornerstone of future implementation efforts.

3. The Need To Simplify Complex Choices

Because consumers will have difficulty making rational decisions related to health care, near-universal health care markets require simplicity in order to operate efficiently. Otherwise, System 1 biases will lead to consumer paralysis while profit-maximizing firms take advantage of poor decision making to arbitrage profits by exploiting system inefficiencies. Extolling the virtues of simplicity, however, does little to provide specific guidance regarding how to encourage more rational health care choices. This Subsection outlines a framework for what simplicity in the health care market might look like, while also considering the constraints that different regulatory responses may place on consumer choice.

It is helpful to begin with a framework for understanding how “debiasing” efforts (that is, attempts to systematically override irrational impulses) intersect with the goal of consumer freedom. David Friedman provides a useful starting point by suggesting that we can think about efforts to reduce System 1 distortions in rational behavior as falling along a spectrum from the most solicitous of consumer freedom to the most restrictive.97 Friedman delineates five levels of government intervention, which can be summarized as follows:

(1) Libertarian or a-paternalistic: government allows a fully free market and relies on consumers to accurately process relevant information;98
(2) Weak-form debiasing: government provides raw statistical information to consumers in an attempt to make them aware of relevant data;99
(3) Strong-form debiasing: government makes available a “concrete instance of the occurrence”100 or “truthful narratives of harm”101 in order to illustrate the downside effects of various biases, although consumer choice remains unrestrained;102

98. Id. at 556.
99. Id. at 557.
101. Id. at 215.
102. Friedman, supra note 97, at 557-58.
(4) Insulating strategies: government protects consumers by creating barriers to entry or hard-to-satisfy standards (such as safety standards in automobiles).\textsuperscript{103}

(5) Outright bans: government bars consumers from choosing certain options in the marketplace.\textsuperscript{104}

One of the ironies of the health care reform debate in the United States relates to this spectrum. Calls to shift from employer-based health insurance to government insurance are often attacked as assaults on freedom of choice; however, private-sector employers who provide health insurance to their employees in effect engage in debiasing option five. That is, private employers typically narrow an employee’s list of health-plan options to a handful of choices that the employer has prescreened for quality, price, and breadth of services.\textsuperscript{105} The ultimate choice presented to the consumer, therefore, involves significantly less cognitive burden than the consumer would face as an individual attempting to purchase insurance on the open market.

One way to facilitate efficient consumer choices would be to take the prescreening process that employers use and apply it to the health care market more generally. The government could enact strict regulations that radically limit consumer choice in the same way that employer prescreening accomplishes. There are reasons, however, to believe that employer-based selection of insurance plans is more efficient than government selection might be. Employers have market incentives—to act as faithful agents for their employees—that might not apply in a larger bureaucratic context.\textsuperscript{106} Because employers use health benefits as a perquisite to attract and retain employees, they have an incentive to select plans that maximize benefits and minimize costs for their employees. It important to underscore, however, that a preference for employer-based screening rests solely on who serves as the better screener, not on whether or not a screener should intervene at all; in either situation, consumer choice is severely constrained.

In light of concerns regarding the government’s ability to prescreen health care plans on a massive scale, option five is not an especially promising mechanism to debias insurance purchasers under the ACA. Instead, the ACA framework for health insurance exchanges adopts an approach that relies on option four. Beginning in 2014, the ACA dictates that state health care exchanges offer four benefit levels corresponding to different coverage levels: a bronze plan (covers 60% of the benefit costs); a silver plan (covers 70% of the benefit costs); a gold plan (covers 80% of the benefit costs); and a platinum plan (covers 90% of

\textsuperscript{103} Id. at 558.

\textsuperscript{104} Id. at 559.

\textsuperscript{105} See Liebman & Zeckhauser, supra note 34, at 248-49.

\textsuperscript{106} Id. at 248.
These tiers are not based on an individual's out-of-pocket expenses. Rather, they are pegged to the "actuarial value" of the plan as calculated in relation to a larger population. Thus, a silver plan is one in which, for "a standard population, the plan will pay 70% of their health care expenses, while the enrollees themselves will pay 30% through some combination of deductibles, copays, and coinsurance." In essence, this approach is an option-four policy that creates barriers to entry for health insurance providers seeking a particular level of certification.

The ACA insurance hierarchy also acts as a heuristic for consumers. Just as the National Highway Traffic Safety Administration's star rating system concisely conveys information to car purchasers about relative automobile safety levels, so too will tiered exchanges concisely convey information to consumers about benefits and out-of-pocket expenses under each plan.

Policy makers can do more to debias health care decision making without usurping consumer choice by developing programs that invoke the "provision of data" under debiasing option two. However, this is a challenging task. A large body of empirical literature has documented how past efforts to provide health care data to consumers regarding everything from hospital quality to medical error rates have done little to change consumption patterns. Doctors Eric Schneider and Arnold Epstein, for example, conducted a phone survey of surgery patients to determine if they knew about hospital report cards published by the Pennsylvania Health Care Cost Containment Council. Only 12% of patients knew about the report cards before surgery, although 58% responded that they might have changed surgeons had they known about the data on surgeon and hospital quality. Similarly, Karl Kronebusch explored the question of whether patients will travel longer distances in order to visit hospitals that perform particular medical procedures at a higher volume, a fact positively associated with quality of care. Specifying a difference-in-differences model—a regression model comparing data from multiple locations at discrete times—that looked at data from thousands of hospital admissions across four states, Kronebusch found only weak evidence that patients will travel in order to access high-


Moreover, survey evidence indicated that patients did not view the number of procedures performed as a salient variable when choosing a hospital, but rather tended to rely on factors like recommendations from friends and family. Kronebusch notes that reliance on these kinds of heuristics might be even more prevalent for patients in metropolitan areas, where the sheer volume of choices could overwhelm patients with choice. Indeed, the empirical literature on the provision of hospital report cards and other performance metrics offers only weak evidence that health care consumers factor performance metrics into their choice of health care providers. The fundamental point is clear: Providing information in ways that improve consumer decision making remains an ongoing public-policy challenge.

These examples illustrate that the effective provision of useful information to health care consumers is difficult to accomplish. However, the public administration literature offers several approaches that HHS and the states could adopt to make new insurance markets under the ACA more efficient. I outline these suggestions in Section II.C, which discusses the design of the ACA’s health care insurance exchanges.

B. Theme 2: The Principal-Agent Problem

If one accepts the premise that individuals are poorly equipped to make efficient, utility-maximizing health care choices, then it seems reasonable to turn to the other half of the doctor-patient relationship—physicians and health care service providers—as a potential avenue for creating more rational health care markets. This approach would focus on providing tools for health care providers to help their patients make more rational health care decisions. While such an approach may sound promising, the doctor-patient relationship in the modern health care economy is such that patients (as principals) may have difficulty relying on doctors (as agents) to act in their best interests. Byzantine payment arrangements between physicians, insurance companies, and private firms (such as drug companies) only further complicate this picture. This Section reviews the nature of this principal-agent challenge and suggests some guiding principles for the implementation of health care reform moving forward.

111. Id. at 806-08 (noting that the relationship between distance and hospital volume varies by type of treatment).
112. Id. at 783.
113. Id. at 781.
114. Id. at 781.
1. The Nature of the Challenge

One of the most vexing aspects of health care reform efforts is identifying the most effective link for reducing costs in the health care delivery chain. Some critics of health care reform insist that government intervention in the health care sector is a needless intrusion. Instead, they argue that efforts to reduce costs should focus on increased personal responsibility, citing unhealthy diets, smoking, and other consumer behaviors that contribute to rising health care costs. Alternatively, many policy makers insist that doctors and insurance administrators must change their practices if there is any hope of bending the cost curve.

The reality is that someone at the consumption end of the health care chain, like a patient, rarely understands the inputs at the production end, such as the market pressures facing drug manufacturers. National Public Radio’s Planet Money team chronicled this disconnect in a recent segment regarding prescription drug copayments. The broadcast detailed how insurance companies initially intended for copayments to function as a signaling device for consumers. In situations in which consumers could purchase a generic drug chemically identical to a more expensive, name-brand drug, the idea was that nominal copayments would marginally increase the cost of the more expensive drug and gently nudge consumers toward the more efficient choice. The “nudging” effect of copayments, however, pitted the interest of insurance companies against drug manufacturers, who want to steer consumers toward more profitable, newer medications. Drug companies started issuing discount coupons, first to doctors and then directly to patients. The result has been a complex maelstrom of pharmaceutical marketing, byzantine insurance administration, and physician ignorance in which often neither doctors nor their patients have any idea what a particular medication actually costs or whether or not there are less expensive alternatives available.

The prescription-drug example highlights a key challenge facing health care reform efforts: the principal-agent problem. In order for health care consum-


118. See Liebman & Zeckhauser, supra note 34, at 234.
ers to adequately weigh the costs and benefits of various treatment and insurance options, those consumers must possess underlying knowledge as to both the efficacy of various treatment programs and their associated expense. Society typically expects that doctors, rather than patients, will be the keepers of this information and transmit it accordingly. As the prescription-drug example highlights, however, physicians often lack this information themselves or lack the inclination to act as insurance administrators, which would require them to spend their time advising patients on the most cost-effective ways to obtain medical care. In other words, understanding the intricacies of medical pricing often requires a level of familiarity with insurance regulations and drug costs that are beyond the scope of most doctors’ knowledge.

Loss aversion, the finding that people tend to overvalue losses and undervalue gains relative to the status quo, also plays a role. Economist Judith Hellerstein, for example, has found that doctor-patient agency problems are especially acute in the pharmaceutical context, where loss aversion often leads doctors to resist trying new, more effective drug therapies or to refuse to prescribe new generic drugs in lieu of more expensive, name-brand medications. Indeed, as Thomas Greaney points out, it may be more accurate to refer to the pharmaceutical context as having the “triple agency” problem of doctor-patient-payer, particularly in a health care economy that relies on a complex administrative apparatus to reimburse physicians for health care services. As the drug coupon saga makes clear, diverging incentives between insurers, consumers, pharmaceutical companies, and health care providers can raise information costs and further obfuscate the mechanisms that underlie health care decision making.

Beyond access to information, the behavioral economics literature demonstrates that other factors often intervene to complicate principal-agent relationships. For example, Psychologist Brooks King-Casas and other researchers asked forty-eight pairs of subjects to engage in a traditional “trust game” while researchers used MRI technology to scan the participants’ brains for neural activity. Their findings indicate that certain kinds of social signals, such as reciprocity (that is, tit-for-tat responses to another’s actions), lead to predictable neural responses that stimulate one person to trust another. These results indicate that people are hard-wired for a kind of “investment” model of trust, in which certain interpersonal signals create the “social juice” that encourages pos-

119. See Kahneman, supra note 43, at 1457–58.
122. See One Pill, Two Pill, Red Pill, Blue Pill, supra note 117.
itive social interactions. This trust dynamic is central to health care markets. As Barak Richman argues, "Without a strong social norm of patient trust, and the corresponding ethical duties placed upon the doctor, the market for health care would collapse under uncertainty." Richman highlights studies suggesting that trust between doctor and patient directly correlates with positive health outcomes, such as adherence to prescribed medication regimens or therapeutic benefits from treatment. Moreover, these trust dynamics are mediated through a complex web of social and economic divides, especially among low-income patients who often depend more heavily on the judgments of their physicians. Empirical evidence suggests that "lower levels of trust among people of color, particularly among African Americans, may help to explain their lower rates of care seeking, preventative services, and surgical treatment compared with whites."

Problematically, however, the trust coin has two sides. While trust is critical in encouraging patients to follow prescribed medical regimens, it also has the effect of turning patients into poor Bayesian updaters with respect to physician performance. This is because patients will often perceive their doctors’ actions through the filter of confirmation bias. That is, if a patient comes to a doctor’s office believing, perhaps because of a personal recommendation from friends or family, that the doctor is an effective physician, actions that might otherwise call the doctor’s effectiveness into question will instead confirm one’s preexisting attitude. Confirmation bias means that patients will often fail to interpret signs regarding lack of effort from their physicians or lack of physician quality, insulating health care providers from many of the mechanisms that normally ensure a self-correcting, competitive market.

2. Potential Debiasing Mechanisms

Given the multivariate nature of the doctor-patient-payer relationship, it is no small undertaking to design debiasing mechanisms that make a patient’s reliance on her physician’s medical advice more efficient. This Subsection sug-

124. Id. at 82.
125. Richman, supra note 37, at 734.
127. Thom, Hall & Pawlson, supra note 126, at 126-27.
128. See supra text accompanying notes 45-50 (discussing Bayesian updating).
129. See Frank, supra note 88, at 16.
130. Id.
gests two broad approaches that inform policy recommendations regarding implementation of the ACA.

First, policy makers could adopt approaches that focus on the physician-patient relationship itself. Richman, for example, finds evidence that high levels of perceived self-control can lead to positive health outcomes in the context of cancer treatment, elder care, and maintaining care regimens for treating chronic conditions. For example, one study tracked the degree to which breast-cancer patients believed that they could control whether their cancer would go into remission. The study found that “women who believed their cancers were controllable exhibited a greater ability to adjust to the psychological and physiological toils of breast cancer.” This suggests that designing administrative systems that empower consumers could be one goal of health care reform implementation efforts. One way to achieve this goal would be to develop systems that lead consumers to feel as if they have greater autonomy over their health care choices. As Section II.C discusses below, one way to do so would be to create mechanisms for purchasing insurance in which consumers have ready access to easily understood, useful information about insurance options. Another approach would take the much more aggressive tack of policing doctor-patient communications for framing effects or other statements that tend to trigger bounded rationality. Twerski and Cohen, for example, propose the idea of “process rights” in the law of medical malpractice. In essence, they suggest that a patient would suffer a “compensable injury whenever a doctor compromises the [patient’s] decision process.” Apart from the issues of monitoring and administrative costs, this approach is also problematic in light of the systems dichotomy outlined in Subsection I.A.2. The distinction between heuristic thinking and purposive, rational decision making is likely inherent in our cognitive wiring. While we might expect medical professionals to take on proportionally more of the burden of debiasing in the doctor-patient relationship, doctors are subject to much of the same probabilistic ineptitude as their patients (recall Tversky and Kahneman’s discovery of pseudocertainty in doctors’ reactions to various treatment scenarios discussed in Subsection I.A.1). In light of this common challenge, expecting doctors to shoulder the entirety of the debiasing burden seems unrealistic and unfair.

131. Richman, supra note 37, at 741-42.
132. Id. at 741 (citing Shelley E. Taylor, Rosemary R. Lichtman & Joanne V. Wood, Attributions, Beliefs About Control, and Adjustment to Breast Cancer, 46 J. Personality & Soc. Psychol. 489, 498-99 (1984)).
133. Id. at 742-43.
A more promising approach is to try to develop administrative systems that align incentives in ways that debias the doctor-patient relationship by looking retrospectively at health care outcomes. One option is to tie doctor pay to the cost-effectiveness of the care provided to their patients. As numerous researchers have outlined, however, this approach has proven to be far more difficult in practice than in theory. While some researchers have found that doctors are quite sensitive to pricing data, they also found significant support for the thesis that administrative challenges and bureaucratic red tape make it extremely difficult to align monetary incentives to achieve change in medical practices.\textsuperscript{136} For example, payment schemes in Medicare and private insurance companies often rely on the collection of charge data that includes information about costs for labor, space, supplies, equipment, and services. When these prices change, there is often a significant lag time before payment systems reflect the new data.\textsuperscript{137}

Cognizant of these difficulties, health care reformers are now looking to a variety of new cost-sharing mechanisms that tie quality performance to remuneration schemes. Accountable Care Organizations, for example, bundle medical services from a wide variety of providers and provide coverage across the entire "continuum of care."\textsuperscript{138} These organizations then receive financial incentives when their efforts result in low overhead and reduced growth rates in the cost of health care delivery.\textsuperscript{139} Some reformers have suggested tying reduced patient copayments to physician use of evidence-based medicine.\textsuperscript{140} Ultimately, these systemic approaches seem more likely to achieve economic benefits than more draconian measures that try to aggressively monitor the doctor-patient relationship.

II. Policy Implications for the Affordable Care Act

The aim of the first Part of this Note was to sketch out two key areas in which the insights of behavioral economics might be particularly helpful to policy makers engaged in health care reform efforts. Part II ties these general suggestions to the administrative apparatus of the ACA. This Part outlines three key elements of the ACA and shows how insights from behavioral economics might prove helpful in their implementation.

\textsuperscript{136} Paul B. Ginsburg & Joy M. Grossman, \textit{When the Price Isn’t Right: How Inadvertent Payment Incentives Drive Medical Care}, \textit{Health Aff.}, at W5-380 to W5-382 (Aug. 9, 2005), \url{http://content.healthaffairs.org/content/early/2005/08/09/hlthaff.w5.376.short}.

\textsuperscript{137} \textit{Id.} at W5-378 to W5-380.


\textsuperscript{139} \textit{Id.} at 7.

\textsuperscript{140} Bending the Curve, \textit{supra} note 21, at 15.
A. High-Risk Pools

Between now and 2014, when most provisions of the ACA become operative, expanded health care coverage is to be provided by high-risk pools. These pools act as insurance markets providing coverage to those with a preexisting condition who have thus been unable to obtain coverage on the private market. Under the ACA, states have the option of either adopting a plan administered by HHS or running their own high-risk pool. Twenty-nine states and the District of Columbia have opted to administer their own plans while twenty-one states have opted for the government-administered plan. The government has appropriated $5 billion to help fund high-risk pools around the country.

The Center for Medicare and Medicaid Services originally estimated that 375,000 people would sign up for high-risk pools by the end of 2010, nearly exhausting the original $5 billion appropriation. As of March 2011, however, only 18,313 people had signed up for participation in a high-risk pool. This presents a public-policy conundrum that has major implications for the administration of the ACA. Some key lawmakers, such as former House Speaker Nancy Pelosi, have suggested that the low enrollment numbers are simply a result of the fact that most citizens lack information about the actual provisions of the ACA. Thus, Speaker Pelosi argues, low participation in the high-risk pools is nothing more than a publicity problem.

As critics of government health programs point out, however, low participation rates in such programs are not uncommon. Richman, for example, reviews the literature regarding persistent gaps in participation rates in Medicaid and argues that pure administrative barriers, such as lack of information, cannot account for the entire gap. Citing studies of Britain's National Health Service that indicate that gaps in health coverage persist even when insurance is

141. See Cassidy, supra note 16.
145. Id.
146. Richman, supra note 37, at 718.
universal. Richman concludes that "extending health insurance does not necessarily induce individuals to enroll in that insurance or to seek medical care that is covered by that insurance; and making medical care widely available does not necessarily translate into improved health." If Richman’s conclusion is correct, it suggests that the enrollment-expansion provisions of the ACA, including the individual mandate, may fail to achieve the goal of increasing access to health care.

Fortunately for the implementers of the ACA, new data from the Massachusetts experiment with universal health care suggest that Richman’s pessimism is misplaced. Within two years of the signing of Massachusetts’s health care reform law in 2006, more than 97% of state residents were insured. Moreover, while the Massachusetts reform effort does contain an individual mandate, that mandate is not enforced against children or adults with incomes below 150% of the federal poverty line. Nonetheless, 56% of the increase in coverage came from individuals below 300% of the poverty line. Thus, Massachusetts has been effective at enticing people into its universal health care program in ways that traditional insurance-extension efforts—including the high-risk pools under the ACA—have not been. The question is why.

Researchers investigating Massachusetts’s experience point to four key factors to explain the state program’s success: (1) a substantial publicity campaign; (2) automatic enrollment for individuals who had previously been enrolled in Massachusetts’s Uncompensated Care Pool; (3) a single application used across nearly all of Massachusetts’s health care subsidy programs; and (4) community organizations and health care providers engaged in a major effort to bring peo-


148. Richman, supra note 37, at 718.

149. DORN, HILL & HOGAN, supra note 74, at 2.

150. Massachusetts law directs the Board of the Commonwealth Connector, the administrative agency charged with overseeing the state health care system, to publish affordability guidelines annually for compliance with the law’s individual mandate provision. MASS. GEN. LAWS ch. 176Q, § 3(p)-(q) (2010). The Board sets the affordability levels, which are then disseminated by the Department of Revenue. 956 MASS. CODE REGS. 6.05 (2008). For 2012, individuals with incomes below 150% of the federal poverty line remain exempt from penalties for failure to purchase coverage. MASS. DEP’T OF REVENUE, TIR 12-2: INDIVIDUAL MANDATE PENALTIES FOR TAX YEAR 2012 (2012), available at http://www.mass.gov/dor/businesses/help-and-resources/legal-library/tirs/tirs-by-years/2012-releases/tir-12-2.html.

151. DORN, HILL & HOGAN, supra note 74, at ii.
ple into the program. These last two are especially noteworthy in light of the behavioral economics literature.

First, integration of Massachusetts's subsidy programs into a one-stop shop is more than an effort to reduce search costs. It targets a key concern with health care markets—namely, the danger that cognitive burdens and status quo bias will drive individuals to avoid changing their insurance status when faced with a complex array of health care choices, even when such a change would be in the consumer's best interest. In other words, administrative costs and behavioral barriers to entry in health care markets are closely linked. Massachusetts's approach successfully minimizes these twin problems. Second, the joint effort by health care providers and community-based organizations to enroll citizens is significant. In light of the research regarding social capital, trust, and health care markets, it is not surprising that community-level efforts to engage people yield significant increases in program participation. Another example from Massachusetts highlights this point. Between 1996 and 2006, fishermen in coastal Massachusetts developed a program called the Fishing Partnership Health Plan to provide affordable health care coverage to an especially peripatetic and hard-to-reach occupational sector. The plan was a stunning success, decreasing the uninsured rate among fishermen from 43% to 13% in ten years. Observers have cited as one of the key reasons for the plan's success the fact that the plan relied aggressively on using trusted community partners, such as fishermen's friends and family, to recruit new members.

The Massachusetts example highlights that the challenge of low enrollment in the ACA high-risk pools goes beyond a need for increased publicity. Pool administrators should be conscious of behavioral economics' key teachings regarding status quo bias, the importance of simplicity, and the social dynamics of trust. More aggressive efforts to partner with community-based organizations at the state level could encourage broader participation in high-risk pools leading up to 2014.

152. Id. at ii-iii.
153. Id. at 6.
154. See supra text accompanying notes 123-130 (discussing trust dynamics).
B. Cost-Containment Efforts

As the discussion of the principal-agent problem in health care demonstrates, reining in health care costs is a massive coordination challenge requiring concerted action throughout the health care industry. In particular, the success of the ACA in “bending the cost curve” will rest on the ability of the law to nudge doctors and other care providers into more efficient methods of providing care. As former Congressional Budget Office Director Orszag has argued, the variation in data across the country regarding the ratio of expenditures to health outcomes must rest on different regional norms among doctors. The success of health care reform is thus bound up in changing doctors’ attitudes regarding their role within the health care delivery system.

The ACA’s approach to this challenge is largely technocratic, relying on the intervention of experts to develop more specific proposals for cost-containment mechanisms. The most important element of this approach is the creation of IPAB. This fifteen-member panel is tasked with monitoring growth in the rate of health care spending. If health care costs exceed the rate of growth in GDP per capita plus one percent, the panel will issue recommendations for decreasing costs that will then be fast-tracked through Congress and, short of congressional action, implemented through regulations by HHS. The hope is that IPAB can push the health care system toward a more evidence-based approach to treatment and care, discouraging expensive treatments with little empirical record of producing better health outcomes. In the context of the deficit debate, the Obama Administration has repeatedly argued that IPAB can reduce health expenditures. In the spring of 2011, the Administration proposed expanding the panel’s powers and changing its mandate to keep health care costs down to a more aggressive rate of GDP per capita plus 0.5 percent.

A behavioral economics approach, however, demonstrates that a purely technocratic effort will likely not be enough to seriously change medical practices. Indeed, empirical evidence suggests that doctors are susceptible to optimism bias, overreliance on habits, self-serving justifications, and a wide array of...
other "irrational" behaviors.\textsuperscript{161} Cost containment must involve mechanisms that circumvent these natural impulses and change cultural norms in the medical community.

One prominent proposal focuses on a "checklist" approach that identifies a series of rote steps, which, in turn, can improve quality of care. Physicians tend to resist these programs, yet numerous studies have indicated that lists of simple procedures can often save lives. Such programs have proven effective at improving health outcomes in contexts ranging from airports to emergency rooms.\textsuperscript{162} The adoption of professional standards for anesthesiologists, for example, is widely credited with radically decreasing anesthesia-related deaths in the 1980s.\textsuperscript{163} At the 2011 Harvard Medical School commencement ceremony, Doctor Atul Gawande argued that the medical profession needs a wholesale revision in its thinking about the role of the individual doctor in a complex, information-overloaded society. Gawande adopted an apt metaphor, arguing that the medical profession needs "fewer cowboys and more pit crews," an approach to medicine in which checklists and protocols are commonplace because individual physicians see themselves as part of a larger health care team rather than as heroic free agents.\textsuperscript{164} From a cost-containment perspective, the hope is that a new, team-oriented ethos among physicians can bolster administrative efforts, like the adoption of Affordable Care Organizations, to integrate cost savings into the provision of health care services more generally.

The behavioral economics literature indicates that these kinds of efforts to shift cultural norms in the medical profession will be as vital to the success of health care reform as efforts to discourage unhealthful behaviors like smoking and obesity. The promise of an approach that focuses on developing new health care norms is that it attacks the problem of inefficient health care markets on two fronts. First, it tackles the bounded rationality phenomena discussed in Section I.A by introducing administrative processes that short-circuit the effects of cognitive biases. The checklist model thus recognizes that overreliance on individual physician performance can lead to the aggregation of errors. In effect, the checklist approach is an attempt to make System 1 processes more efficient and less error-prone.\textsuperscript{165} Second, the model addresses the principal-agent dynamics that frustrate an individual's ability to make efficient health care choices. A

\textsuperscript{161} For a general discussion, see Greaney, supra note 121, at 1197-1200.


\textsuperscript{163} Orszag, supra note 30, at 7 (citing David Hyman & Charles Silver, You Get What You Pay For: Result-Based Compensation for Health Care, 58 Wash. & Lee L. Rev. 1427 (2001)).


\textsuperscript{165} See supra text accompanying notes 76-79 (discussing System 1 and System 2 processing).
norm that celebrates doctors as team players rather than as heroic actors is more conducive to reform efforts that require cooperation among a multitude of health care actors. These norm-changing efforts will thus be a critical complement to other, more technocratic efforts in the coming years.

C. Health Care Exchanges

One critical area of the ACA where the teachings of behavioral economics will be especially helpful is the creation of state exchanges. The ACA leaves most of the institutional design choices regarding the specifics of state exchanges to HHS. HHS is currently engaged in a rulemaking process that will specify in greater detail how the exchanges will operate. With respect to the consumer experience, HHS has thus far offered only broad guidelines: Exchanges will be “designed for consumers” and will make it easy for consumers and small businesses to compare health plans, get answers to questions, find out if they are eligible for tax credits [to help pay] for private insurance or health programs like the Children’s Health Insurance Program (CHIP), and enroll in a health insurance plan that meets their needs.

The teachings of behavioral economics should prove helpful as HHS continues its rulemaking efforts. Designers should be attuned to the real risk of cognitive overload that afflicts consumers making complex health care consumption choices. As the experience with extreme price variation in the context of Medicare Part D plans indicates, when consumers are not easily able to compare prices along useful metrics, the competitive marketplace will lead to inefficient consumption outcomes. Designing efficient health care exchanges does not necessarily mean restricting consumer choice; it simply means creating a marketplace in which “[c]hoice is optimized [because] it focuses the enrollee’s attention on the salient features of the health plans.” In order to apply the lessons of this research, HHS must take its regulatory responsibilities as overseer of the state exchanges.

167. Affordable Insurance Exchanges, supra note 18.
168. See supra text accompanying notes 82-86 (discussing choice proliferation and its consequences).
169. See Frank & Zeckhauser, supra note 87; supra text accompanying notes 87-92.
170. See discussion supra Subsection I.A.2.
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seriously. A laissez faire approach to certification or presentation of information nearly guarantees consumer confusion and suboptimal outcomes.

There are several key requirements that should accompany successful transparency regimes:\footnote{172} (1) Information must be easy for citizens to use;\footnote{173} (2) metrics must promote accuracy and comparability;\footnote{174} and (3) metrics must focus on comprehension.\footnote{175} Restaurant sanitation grades in cities such as Los Angeles and New York are excellent examples of the effective provision of information to consumers.\footnote{176} City health agencies engage in an aggressive regime of inspection and reporting in order to gather the relevant data regarding food safety practices. They also develop an algorithm to transform the results of that reporting into one, easily understood metric. This involves a significant administrative effort and collaboration with the local restaurant community. In New York, however, the resulting message to consumers could not be clearer. Each restaurant receives a letter grade: A for satisfactory, B indicating some problems, and C indicating failure. These grades are plainly posted in restaurant windows and are visible from the street. Consumers know what this information means and how to integrate it into their decision making about where to dine.

HHS should learn from the sanitation-grade experience and focus aggressively on providing an intuitive, straightforward display of relevant information to exchange customers. By helping consumers distinguish between irrelevant marketing and actual differences in coverage, regulations can foster the sense of self-control and empowerment that often correlates with better health outcomes.\footnote{177} Moreover, by streamlining and simplifying the number of variables that a consumer must consider when choosing an insurance policy, the exchanges can help consumers better match consumption decisions to their risk preferences. This should help make health care purchases more efficient. The system for “shopping” the exchanges must therefore allow consumers to conduct apples-to-apples comparisons of health care plans without being completely overwhelmed by data. This will require making hard decisions about what variables are or are not relevant and how such information should be presented.

HHS has already moved substantially in this direction by releasing a draft version of a four-page disclosure document, the Summary of Benefits and Cov-

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173. Id. at 3.
174. Id. at 4.
175. Id.
177. See supra text accompanying notes 131-133.
verage (SBC), that, beginning in September 2012, will accompany the standard marketing materials provided by insurers to potential customers. One commenter has already dubbed these "nutrition labels for health insurance," an evocative phrase that captures the goal of providing consumers with clear, easily understandable information about health care choices. The drafting of the disclosure document has not been without controversy, however, with health insurers and consumer groups sparring over the amount of detail to include in the mandatory disclosure. The current SBC regulations include information on deductibles, out-of-pocket expenses, specialist coverage, in-network and out-of-network services, dental and vision care, and notable care exclusions. Perhaps most interestingly, the SBC contains two coverage examples, having a baby and managing diabetes, that break down hypothetical insurance coverage and patient costs (see Figure 1).

The current SBC draft represents an impressive attempt to convey critical information to consumers in an easy-to-read, comprehensible fashion. The first page, in particular, provides straightforward information about deductibles and out-of-pocket limits that will help consumers compare plans along similar metrics. Similarly, the coverage examples represent a useful attempt to provide consumers with illustrations of how their insurance might work without


overwhelming them with unnecessary or confusing information. Indeed, before HHS adopted the draft SBC, the draft disclosure underwent two focus group and interview sessions, one conducted by insurance companies\(^{185}\) and one conducted by an outside consumer group.\(^{186}\) Several key findings from the latter of

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these sessions are worth noting. First, the use of coverage examples appears to have been very helpful in grounding consumers' analysis, serving as a helpful corrective to the kind of cognitive errors discussed in Section I.A. Second, researchers found that consumers were able to identify key information about costs and deductibles in the SBC and think about the ways in which to apply it to their personal health care decisions.

However, some findings merit a note of caution. For example, researchers found that individuals preferred more detailed versions of disclosures that broke out specific costs rather than listing one lump sum. As previous research regarding consumer choice has indicated, however, a preference for more data in the present does not necessarily translate into future satisfaction. Future efforts to improve the SBC should focus on tracking consumers' actual experience with purchasing insurance rather than simply presenting hypothetical consumers with draft disclosure forms. It may turn out that there is a gap between the information that consumers think they want and what actually turns out to be helpful.

Identifying the best manner in which to convey information through the exchanges is only half of the challenge. The other half is determining what data will help consumers make more rational insurance choices. Frank suggests a useful dichotomy: We need to think both about the consumer experience with health care (that is, the ease with which patients interact with the health care system) and the quality of the care itself. While the SBC will help consumers make more reasoned decisions with respect to the first metric, it does not provide assistance with respect to the second. Assessing quality of care requires an understanding of both medical science and systemic evaluation that is beyond the ability of the average health care consumer.

Communicating quality-of-care data will therefore require policy makers to think critically about how to assemble and present the data in an easy-to-understand manner. Consequently, it makes sense for health care exchanges to offer consumers two different metrics for comparing insurance plans. The first should focus on consumer experience, while the second should focus on professional benchmarks of care quality.

The consumer-oriented metric could rely on a standard survey instrument designed by HHS or the insurance community. Alternatively, a bolder approach might involve integrating a Yelp-style ratings system into exchange websites.

187. KLEINMAN COMMCM'NS GRP., supra note 186, at 9.
188. Id. at 21.
189. Id. at 11.
190. See supra text accompanying notes 84-86 (discussing lyengar and Lepper's research on choice and happiness).
192. Yelp is a website that provides, according to its own description, a “fun and easy way to find and talk about great (and not so great) local businesses.” Yelp,
Such a system would help solve one of the key inhibitors of rational health care purchasing decisions, the overreliance on recommendations from friends and family. By aggregating large amounts of information into a single rating metric, Yelp presents its readers with a simple, comprehensible benchmark for making consumption choices. A Yelp-style system would allow exchange customers to make insurance decisions based on a “wisdom-of-crowds” approach rather than relying on more dubious heuristics.

Moreover, other websites have demonstrated that simple, easy-to-use interfaces that aggregate user-provided content can be quite effective in shifting the behavior of bureaucratic systems. The website SeeClickFix.com, for example, allows users to input data regarding local grievances, such as unfixed potholes or malfunctioning streetlights. The site has been quite successful in “crowd sourcing” user-provided content to improve the provision of municipal services.\(^{193}\) A series of SeeClickFix.com complaints by members of the Wooster Square neighborhood in New Haven, Connecticut, expressed concern that the lack of lighting on a local footbridge created a prime location for the mugging of evening commuters. The city responded by installing solar-powered lighting on either side of the footbridge.\(^{194}\) Likewise, a website that asked consumers to rate their satisfaction with their health insurance could provide a way to quickly and efficiently communicate the quality of the purchaser experience to customers. A temptation might be to disaggregate this kind of evaluation, asking a small sample of consumers to complete a more rigorous evaluation of their insurance providers along a broad variety of metrics, but the restaurant sanitation grades example suggests that this kind of approach is precisely the wrong way to communicate useful information to consumers. A single metric is a stronger way to integrate satisfaction data into the exchange experience.

Second, health-exchange websites should provide an easily understood metric regarding health care quality. While such data might help make health care markets more efficient, consumers often do not realize that this kind of information is available. A 2004 survey revealed that only one in three health care consumers had reviewed any quality data in the previous year regarding different health plans, doctors, or hospitals.\(^{195}\) There has been some push among pol-
icy makers to make quality data more easily accessible. For example, HHS runs a website that gathers data on hospital quality. The information, however, is both difficult to access and unwieldy to navigate. A visitor to the website starts by entering a zip code and is presented with a list of local hospitals. After clicking on a hospital, the website offers four categories of quality data: (1) process-of-care measures, (2) outcome-of-care measures, (3) use of medical imaging, and (4) survey of patients’ hospital experiences. Visitors must click through each of these categories—each of which presents data using different criteria and different benchmarks—in order to have any sense of how hospitals stack up against one another. The overall design of the website is far too burdensome to provide the kind of one-look heuristic that will help consumers make decisions while avoiding the choice overload that often accompanies making probabilistic choices in the face of too much information.

A far better approach for the ACA exchanges would be to present a single metric that aggregates large amounts of information related to quality. Interested consumers could drill down into the underlying data, just as Yelp readers can browse individual reviews. The key element, however, is a simple way to present large amounts of data quickly to exchange customers. This is in some respects counterintuitive, insofar as policy makers often believe that bombarding consumers with information will help them make better choices. A streamlined exchange system will thus be open to the charge that it overprivileges some kinds of data while glossing over others. Still, the provision of quality data to consumers will be effective only if it is simple enough to understand and quickly assimilate into health care purchasing decisions.

The use of technology and the Internet can be only part of the story of creating successful health care exchanges. Researchers have found that the use of data to make health care decisions is consistently lower among less-educated and poorer populations. Policy makers implementing the ACA must be cognizant of the fact that overreliance on easy-to-access forms of information, such as websites, may reinforce socioeconomic divides in the health care market. As with the cooperation of community-based organizations in implementing

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197. See, e.g., Geraint Howells, The Potential and Limits of Consumer Empowerment by Information, 32 J.L. Soc’y 349 (discussing the prevalence of disclosure and information rules in consumer protection policy despite the limitations of such regimes).
198. See Kronebusch, supra note 110, at 782.
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Massachusetts's health care reform law, the engagement of community leaders and health care professionals will be critical. The fundamental point, however, remains: Only through careful consideration of both what information to provide to consumers and how to provide it most effectively will the exchanges avoid tripping over the same behavioral obstacles that have traditionally made purchasing health care coverage so daunting for consumers.

CONCLUSION

The task facing health care reformers in implementing the ACA is much more than a series of administrative hurdles. It is also a challenge of political economy. Political rhetoric always prizes freedom of choice such that any efforts to cut down on consumers' options are ripe for attack. Further, one of the ACA's liabilities is that it is so expansive. By trying to improve efficiency all along the health-production chain, the law is open to criticism for inefficiency and vagueness. Consider the law's allotment of $15 billion over the next decade to promote healthy behaviors and reduce the incidence of especially costly health conditions like obesity. House Republicans recently labeled this a "slush fund" and voted to eliminate it altogether.200

The ultimate success of efforts to bend the cost curve while expanding coverage will, in this charged political environment, hinge on a long and difficult slog for administrators and health care reformers alike. The key lessons of behavioral economics should, however, provide guidance throughout this process. An approach that recognizes the confusion that often surrounds health care purchases and the need to build social trust between doctors and patients, and one that seeks to empower consumers rather than overwhelm them, is the only way for health care reform ultimately to succeed in its mission to both expand access and reduce costs.
