Nudges in Health Care Plans

and the Effect of Choice Architecture On Decision Makers

Maximillian Kaye

Behavioral Economics

Professor David Owens

December 19, 2013

When a person develops an illness, the ability to pay for medical care can play a significant role in determining quality of life, and can even be a matter of life or death. Many problems facing individuals and society as a whole in the healthcare arena are neither medical nor scientific in nature; rather they are behavioral. In choosing health insurance, behavioral patterns factor into every aspect of the decision making process. Ideally, rational decision makers seek information on the quality and cost of all feasible options and properly use this information to maximize their utility for all choices concerning their best interests. This ideal implicitly assumes that rational decision makers have known constructed preferences for choices that are, in actuality, superior. However, most individuals do not gather and process the proper information necessary to choose the most appropriate health insurance plans to suit their particular needs (Engelhardt & Gruber, 2004), and this often results in attaching too much value to the status quo. To help resolve this issue and assist people in reaching their health coverage goals, nudges that guide people towards making the best choices for themselves can serve as a valuable tool to the benefit of both individuals and society as a whole.

The decision making process for choosing health care insurance can be broken down into three main decision categories: 1. whether or not to purchase health care insurance, 2. whether to purchase insurance plans with low premiums and high deductibles or instead purchase plans with high premiums and low deductibles, and 3. beyond determining whether to pay low or high deductibles, which plan best suits an individual's needs. In considering the second and third categories, the problem of making choices regarding health insurance plans lies in the essence of the Nobel prize-winning theory of bounded rationality. The theory states that people have limited available cognitive resources and time to realize the best possible choices (Simon, 1955, p. 100). Thus, when presented with complex or too many choices, humans use heuristics to narrow their

choice sets and end up forgoing the potential to maximize their utility, which in turn causes them to run into systematic errors in predicting future 'hedonic' experience of outcomes (Kahneman & Tversky 1982, p. 1124; Simon, 1955; Thaler & Sunstein, 2009, p. 222). In his book *Simpler*, Sunstein (2013) sums up the most common human errors that interfere with good decision making: humans suffer from inertia because they stick to the status quo, procrastinate instead of making changes, place more weight on short term interests rather than thinking about the long run, and underestimate risks. Sometimes too many choices can lead to decision "paralysis," thereby preventing any decision from being made at all (Iyengar, 2010). One of many studies proving this demonstrated that only 3% of people purchased a jar of jam when presented with 24 choices, wheres 30% purchased a jar when the choices were limited to 6 types (Iyengar, 2010, p. 185-187). This could lead to a decision not to purchase any health insurance. In the case of health care, the problem of overcoming typical human errors in order to make a good choice is compounded by the fact that choosing health insurance is complicated.

The complexities inherent in the individual selection of the most preferable health care plan options are even more apparent in the cases of recent college graduates, other young adults, and persons who have no prior experience with purchasing health insurance (Deutschle, 2012). Not only do these "naive" individuals deal with their own problems in general choice-making, or knowing what they like, but they are also subject to the difficulties and intricacies inherent in the United States' free market insurance system. Here, the private insurance market gives companies strong incentive to cater to and profit from human frailties and naivety (Thaler & Sunstein, 2009, p. 72), such as younger individuals being twice as price sensitive as older individuals when choosing a health insurance plan (Ericson & Starc, 2012, p. 1). Thus, a younger or highly price sensitive individual may select an inexpensive plan that actually does not meet that person's

needs, which could result in costing the individual more than if an expensive-premium plan had been selected. A simple yet clear example of how this could happen can be seen in the case of hypothetical, price-sensitive people who spend $100 monthly premium on a health care plan with a $5000 annual deductible, foregoing an opportunity to pay $150 monthly premium for a plan with a $1000 annual deductible. These individuals would save $600 in premiums over the course of a year, but if they were sick with an expensive illness such as diabetes, they would be paying up to an additional $4000 out-of-pocket, resulting in a significant total loss of $3400 per person. To exacerbate the situation, if these people decided not to pay for the additional medical costs out-of-pocket, and instead to remain untreated, then their health condition would probably decline, costing themselves far greater expenses in the long run because of the resulting need to treat more serious conditions. Society could also pay for this poor decision in a variety of ways, including monetary expenditures if the ill person had a low enough income to allow for Medicaid coverage or government subsidies, and the loss of the ill person's contribution to society through activities such as work and community service. On the other hand, high deductible plans have benefits, such as preventing people from seeking unnecessary medical care due to the tendency to be more cautious about spending health dollars when expenses are out-of-pocket and not paid by a third party (Dizikes, 2013; Levins, 2012). Whether to choose a lower premium plan with a higher deductible is a primary factor to consider when selected an insurance plan, but which type of health coverage to select also requires consumers to analyze many other variables that affect cost, such as whether a particular medication is covered, what coverage tier applies, and which cost formula is applied to a given tier (Smith, 2013).

With the recent introduction of the Affordable Care Act ("ACA," the "Act," or "Obamacare"), which admirably purports to provide access to health care plans for all

Americans, there will be many more individuals who are in the same category as the recent college graduates in terms of their naivety in selecting health insurance because of the ACA's complexity. The policy behind the Act of simplifying the amount of available choices of premium payment/deductible levels mitigates consumer exposure to information overload from the vast array of private health insurance companies by narrowing these choices to four categories dubbed "metal levels," with bronze, silver, gold, and platinum levels ranging in price from lowest to highest, respectively (Kurtzleben, 2013). However, expanding access and limiting the number of premium level choices does not go far enough for two main reasons. First, after selecting a premium/deductible level, there are still too many choices to select from with regard to the actual insurance plan (Kurtzleben, 2013). Second, the Obamacare system of providing coverage is only sustainable if large numbers of "young and healthy people" pay premiums to cover old, sick people- and not enough young people are enrolling (Harris, 2013; Martin, 2013, p. B1). Additionally, in determining which plan to choose, the newly enabled purchasers who are making the selections are naïve to the implications of buying health care under the ACA, and therefore susceptible to external influences such as biased parents and peer groups, given that they know very little about the outcomes of choosing from the different plans that Obamacare entails. That is, since there are still crucial gray areas being discussed regarding the ACA, it is not just the young people who have trouble forecasting outcomes of whether choosing to buy particular plans through the Affordable Care marketplace is beneficial or not; nearly everybody is in a similar position. Even an expert working as an employee benefit consultant who spent three years deciphering the ACA has to carry "cheat sheets" to remember how to unravel the relevant complications (Moeller, 2013).

There are numerous examples of additional uncertainties related to Obamacare that are dissuading some people from choosing to enroll or from making the best choices regarding type of coverage, including important aspects of receiving health care that go to the very heart of physician patient relationships and personal security from identity and other theft. The uncertainties include whether individuals will be able to go to hospitals and physicians of their choice since the health care providers may not be approved providers of the plans, and whether those providers of choice that are included on the selected plans will be willing to participate in the insurance plans offered by Obamacare and accept payments by those plans (Harris 2013; Martin, 2013, p. A4). Another major unknown is whether the private information of plan purchasers who make their purchasers over the HealthCare.gov website will be secure and protected from wily hackers. Adding to the confusion, "thousands of insurance applicants...at least one in five...have received inaccurate assignments to Medicaid or to the marketplace for private plans, or have received incorrect denials (Weaver, 2013, p. A1). The consequences of errors caused by the enrollment process range from having to start the lengthy account set-up procedure from scratch to participating in an appeal process (Weaver, 2013, p. A1), which further discourages plan selection because of peoples' natural desire to avoid complexity.

To combat the multiple obstacles that are interfering with people's ability to make the best health insurance choices, choice architecture can help nudge consumers towards selections they would make "if they knew what the experts know" (Callanan, 2013, p. 2; Sunstein, 2013). In order to understand why nudges are needed in order to influence health care consumers, the effectiveness of nudges, and their potential to positively influence the decision making process in choosing health care plans, Thaler and Sunstein's insights are informative. Essentially, Thaler and Sunstein (2009) explain that libertarian paternalism provides the best of both worlds when it

comes to determining policies on whether to attempt to affect people's choices. On one hand, the libertarian angle aids consumers and citizens in improving their decision making processes and abilities by providing people with the freedom to choose, while on the other hand the paternalism side of the equation guides how they will choose by manipulating choice architecture in a manner that allows experts or formal decision makers to exert their influence. Thaler and Sunstein argue that entities should nudge people towards decisions that are in their best interest, especially when people are susceptible to making poor decisions. This theory gives credit to policies and policy makers who argue that governmental and other private organizations provide aid to consumers in the critical decisions they face. Restated in Thaler's terms as to how libertarian paternalism applies to health care, nudges encompass both the need for clarity and the fact that choosing a health care plan is harder than it seems, especially for someone who does not know much about health care and/or has no experience in making health care purchases (p. 72).

My opinion is that there are certain aspects of the ACA's implementation that are objectively beneficial to consumers' decision-making processes, and that do encourage obtaining proper insurance coverage. One positive characteristic is that the options for choosing a level of coverage with regard to premium costs are laid out in a simplified manner that downplays the potentially overwhelming nature of too many insurance plan choices (Shutan, 2013). That is, consumers can see the distinctions between the plans without having to cognitively process a load of jargon and technically irrelevant details. It is also helpful that Obamacare used nudges such as an opt-out technique (discussed further below), which should effectively influence people to purchase plans and cause employers to maintain employee insurance (Callanan, 2013).

The Obamacare nudges are consistent with President Obama's belief that behavioral economics can help create policies that are cost efficient and assist people with achieving their

goals (Tate, 2013). The nudges were only used to "reinforce" insurance enrollment decisions, since "regulatory shoves" were also enacted into law, mandating that citizens pay a penalty if they did not sign up and that certain employers pay fees if they do not insure employees (Callanan, 2013, p. 5). However, the nudges and shoves used to date have not resulted in expected numbers of enrollees (though perhaps even less people would have enrolled without them). One reason for this problem could be that after getting beyond the initial decisions to purchase a plan and the level of premiums and deductibles, users of the Obamacare health care exchanges nevertheless have to distinguish between an average selection of fifty-three plan choices that underlie the chosen premium-level (Kurtzleben, 2013). This may overwhelm consumers to the point of decision paralysis, especially when combined with other considerations such as technical difficulties in using the HealthCare.gov website, all of which have caused the actual numbers of purchasers to be far lower than expected and desired. Despite a quadrupling of the number of Obamacare enrollees after improvements to the website, the shortfall of approximately 7 million new customers is "stunningly, dramatically below expectations" (Kennedy, 2013 quoting Alan Cohen). The disappointing numbers validate the value of exploring how additional nudges could assist with health consumer decision making.

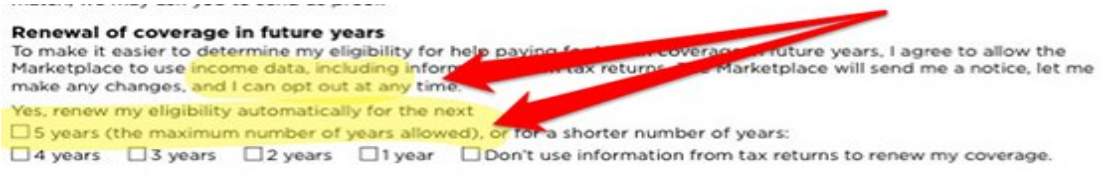
Nudges can aid choices regarding each of the three health insurance decision categories (whether to have insurance, level of premiums and deductibles, and type of plan). I believe that nudges provided within my experiment will significantly influence people in two ways. First, just as the opt-out nudge used in Obamacare applications may encourage certain decisions, this technique can be utilized in other medical settings to encourage better health decisions. Second, once the decision has been made to purchase a plan, the emotional and default nudges in my experiment could guide people by influencing which level of plan they will choose, and could

perhaps encourage affirmative decisions to purchase a plan. Following suit with the simplified aspect of Obamacare, in this second part of my proposed experiment, very simple and distinct options will be presented to participants; the choices will lay out in an easily comparable and distinguishable manner. Finally, with regard to the third decision category, in the discussion section below I propose a nudge to provide customized, comparative information to people when they are faced with the excessive amount of available options. Dependent on the findings of the experiment, analyzing how certain nudges affect these choices will have high implications for future formulation by policy makers for insurance plan options, as well as choice architecture presented to the consumers who are seeking optimization.

The first aid I seek to investigate is the classic nudge known as the default option, which has been successfully implemented in governmental and private policies including programs to encourage participation in organ donation and 401(k) retirement plans. The Swedish government "did an excellent job" in demonstrating the power of default option nudges in the case of organ donation and privatization of social security (Thaler & Sunstein, 2009, p. 157; John, 2013). This nudge worked as follows. When 'yes' checkboxes were pre-selected as the default options, choosers had to opt-out by un-selecting the checkbox in order to not participate. This resulted in significantly higher retention and participation rates than when compared to not having pre-selected defaults (Thaler & Sunstein, 2009). The default nudge takes advantage of the behavioral trait whereby people have the tendency to do nothing and follow the path of least resistance, thus maintaining the status quo despite the fact that a change could be advantageous (Deutschle, 2012). I agree that the "yeah, whatever" heuristic, inertia, and status quo biases are sufficient explanations for the use of this nudge (Thaler & Sunstein, 2009, p. 83). Moreover, there are multiple types of default options, some making it harder to opt-out than others. For the purposes

of this experiment, I will use what closely resembles what Thaler calls "explicit consent," so that libertarian properties of free choice are retained.

The ACA utilizes the default nudge to encourage maintenance of coverage in two ways. First, it requires businesses to enroll employees in insurance plans with the option of opting out (Callanan, 2013, p. 5). Second, as seen in the figure below, Obamacare applications now state "Yes, renew my eligibility automatically," with option boxes to check starting with a 5 year option (Strether, 2013).



This form therefore appears to require that the purchaser take action in order to renew insurance for *less* than five years, whereas the previous, initial draft of the form required a purchaser to take action in order to renew for *more* than one year (Strether, 2013). A clarification rule may be adopted, but meanwhile the inference that consumers have to opt-out of five year renewals can be drawn from both the inclusion of the words "opt-out" and the placement of the five year choice first, whereas in the previous application draft it was placed last (Strether, 2013).

In light of how powerful default options can be in nudging people, I drafted a form intended to test the opt-out provision's effectiveness as a nudge and to encourage better health care for diabetics through attendance at education classes (see Appendix A). Diabetes in the U.S. alone is estimated to cost approximately 245 billion dollars per year in direct medical costs and reduced productivity, and has serious complications including blindness, amputations, heart, kidney, and nerve disease, and death (American Diabetes Association, 2013). Although diabetic education classes are proven to effectively prevent and delay complications, many diabetics are unwilling to attend classes (Graziani et al., 1999). In the Palm Beach Diabetes and Endocrine

Specialist medical practice, Dr. William Kaye informed me that 30% of his patients refuse diabetic education. Thus, the form attempts to nudge patients towards deciding to attend ten hours of diabetic education classes (Appendix A). To accomplish this, after enlightening patients that the classes will help them by stating that the classes are part of a premium plan and that the doctor recommends attendance, the form contains a pre-checked box stating, "YES!! I will attend…" (Appendix A). The patients have to actively check the "no" box if they are not going to agree to attend, which states that they wish to opt-out and that they understand the classes would have been helpful for good diabetic control. So far, the Palm Beach Diabetes practice has presented this form to 50 patients who would benefit from the classes, and 40 of them agreed to attend- an increase from 30% to 80% agreement. I am tracking the success rates of obtaining agreement when patients are presented with the form through Dr. Kaye's patients, and I am tracking rates of agreement to attend classes when patients are not presented with the form through a control group consisting of patients of another one of the practice's physicians. I intend to continue to record the data until I obtain the results of 500 patients from each group.

The second decision category nudges, which are intended to influence which premium and deductible levels are chosen, involve dual elements of whether to purchase a plan at all and which level to select. The decisions of whether to purchase health care and which plan to choose are among the most important decisions in a person's life in terms of both economics and health, and making the wrong decisions has the potential to drastically affect quality of life. This is why my goal is to determine whether certain types of nudges can influence recent college graduates and inexperienced health care consumers, who I consider to be naive in this regard, when they are faced with choosing health care plan options for the first time. In executing my experiment, I intend to first determine which of two nudges has a greater impact on decisions for choosing a

plan by pinning the two against each other in the same condition. Additionally, an experienced group with individuals having at least five years of prior experience with choosing health plans will be included for comparison purposes. This group will permit me to analyze whether prior experience has modulatory effects on strength of the nudges.

In an effort to further replicate the plethora of studies that forecast how future emotional and hedonic states are anchored in the present, a nudge will be presented in the form of a pre-survey and is more visibly subtle than the default option. The aim of this nudge is to appeal to the emotions and past memories of choice makers, bringing salient certain memories, fear of loss, and a degree of uncertainty about the future. The mental state of the individual in the 'current present' is likely to influence the intuitive evaluation of the value of options when a decision is made (Kahneman & Thaler, 2006). This finding, coined as "projection bias," is merely to state that people will err more severely when the nature of the decision focuses attention on aspects of the outcome that might or might not be salient when it is actually experienced, given a point in time (Loewenstein, O'Donoghue and Rabin, 2003). More specifically, the nudge (in the form of a questionnaire) highlights the importance of emergency medical coverage over all other forms of coverage (Appendix B). In seeing how these nudges individually influence behavior, and then having both in the same condition of the study, a better grasp of the power of nudges should be attained, and the aid it can provide to health insurance consumers now and in the near future can be substantiated.

Based on previous research, I hypothesize that the questionnaire responses will lead to the following conclusions: 1) for the naïve participants, the default nudge will show a stronger preference towards the original health plan from the baseline condition; 2) the emotional nudge will show a stronger preference towards the health care plan with the greatest emergency

coverage from the baseline condition; 3) the combined nudge condition will show a preference for the emergency coverage plan, albeit weaker than in the second condition, as I believe the emotional nudge to have stronger influence of the two. With regard to experienced participants, I expect to find the same pattern of results. However, 4) I predict that the influence of the nudges will be relatively smaller in experienced groups compared to those in the naïve group. Experience may show some modulatory effects on bias, but experts are still strongly affected by these basic heuristics.

Methods

Pre-survey

A series of pre-surveys will be implemented, with 250 Swarthmore students (excluded from participation in final study) participating in order to develop healthcare plans that result in an even distribution of preferences across the three health care options provided. The constructed plans are listed as follows (all equal in terms of deductible and premium).

Healthcare Plan	**Co-Pay**	**Emergency**
HC 1	$10	$100
HC 2	$50	$350
HC 3	$100	$1,500

Participants

Two groups of randomly selected English speaking individuals will participate in the study. The naïve group includes 320 healthy undergraduate students at Swarthmore College, [Swarthmore, PA, USA] (age 20 ± 2 years, range 18-22 years) who have never chosen their own

health insurance. The experienced group includes 320 participants from the Philadelphia area who have had at least five years prior experience in purchasing healthcare plans. Participants are recruited through an email notice posted by a non-partisan healthcare information and education think tank with the mission of raising health awareness. Participants will be debriefed on the rationale of the study after the experiment is conducted. At the end of the experiment, all participants will receive a bottle of water as compensation.

Design

Participants in each group are randomly assigned into one of four conditions (80 per condition per group), and each student will participate in only one of the conditions. The four conditions include:

1.) Baseline condition (no nudge): Participants select the healthcare plan of their choosing with no additional influence. This perfectly libertarian free choice condition will serve as a control for baseline rates.

2.) Default Option (nudge): Participants are told that HC 1 was their default plan and they have to decide whether to either stay with what is pre-selected for them or switch to one of the other two plans.

3.) Emotional Nudge: Participants will complete a survey (Appendix B) aimed at emphasizing the importance of emergency coverage before choosing a HC option (no default option).

4.) Combined nudge: This condition is the same as emotional nudge condition; with the addition of the pre-selected default set to HC 1.

Procedure:

Participants fill out a short survey beforehand with questions concerning demographic information and prior healthcare experience. They are then briefed on health care plan

terminology, such as co-pay (doctor's visits) and emergency coverage (emergency costs covered by insurance), before undertaking the experimental conditions (see above). All components of the experiment are conducted online. This process is repeated equally for every participant. The data is automatically recorded after every participant successfully completes the task.

Expected Results

Using the baseline preference percentages for both groups allows for examination of the effects of the nudges across all three variable conditions. As predicted in my hypotheses, I expect to see an increase in preference for *HC 1* in the default nudge condition as compared to results from the baseline condition in both the experienced group and the naïve group. Further, I predict to see an increase in preference for *HC 3* in both groups in the emotional nudge condition as compared to results from the baseline condition in both groups. Finally, I expect to see an increase in *HC 3* relative to baseline in both groups in the combined nudge condition. However, I expect the net overall change in preference to be smaller than the second condition exhibits because of the competing pull of the default bias.

I believe the emotional nudge is stronger, and will thus lead to a greater pull than the default nudge. However, one other alternative hypothesis that I have not yet mentioned exists. Because of the bidirectional pull of the two nudges, there is a reasonable possibility that decision makers will end up choosing the 'neutral' option, *HC 2*, which neither favors the default option nor the emergency coverage option. This would indicate that a consumer, when faced with competing biases, might simply opt for an "average" plan, and not necessarily what may work best in their specific case. The possibilities for the combined nudge condition can be laid out as follows:

1.) Given *low-copay healthcare plan (HC 1) is preferred:*

If I can observe strong enough tendencies in individuals choosing the low-copay plan given the combined condition, this means that the default nudge had more significant effect than the emotional nudge.

2.) *Given emergency-oriented healthcare plan (HC 3) is preferred:*

If I observe strong enough tendency in people choosing the emergency-oriented healthcare plan, this means that the emotional nudge had a greater effect than the default nudge.

3.) *Given neutral healthcare plan (HC 2) is preferred:*

If the neutral plan (HC 2) is preferred over the other two plans (HC 1 & 3) in the combined condition, it could be the case that the default nudge and the emotional nudge have seemed to offset each other, but only in outcome and not personal effect. That is, the choice maker is conflicted between the paternalistic default aid and the emotional manipulation. When struggling between cognition and impulse, it is possible that the choice maker ends up conceding to the suboptimal choice: the one in the middle.

4.) *None of the plans are preferred to another:*

Results will look similar to those in the baseline condition. If this is true, I can conclude that the effects of nudges have simply offset one another. In this outcome, the strengths of the nudges could be considered equally weighted polar opposites.

In order to compare the naive and experienced groups, I can examine the relative differences in preference between conditions between the two groups. That is, I can look at the relative strength of the nudge in the naive group, and then compare that to the relative strength of the nudge in the experienced group. Here, I expect to see a similar pattern of results, with a smaller effect of the nudge across all three conditions due to the "expertise" of the decision makers.

Discussion

This survey experiment has three main goals: 1) Support the hypothesis that emotional nudges out-weigh opt-out or default nudges when choosing health care plan levels. What is important to note here is that although this is an important part of the study, the claim and prediction that this is the case has limited external validity given the infinite ways one can pin different nudges, anchors, and frames against each other to promote alternative selections. However, it raises awareness and sparks innovation into different ways that one can replicate this experiment to obtain similar observations.

More importantly, I wanted to show that 2) naïve choice makers, who have little to no experience in purchasing health insurance, fall relatively more victim to behavioral manipulations and influence tactics in insurance plans than do those with substantial purchasing experiences. That is, the nudges will have less effect on the experienced individuals who have learned the ins and outs, and greater effect on those new to the game.[1]

The overarching aim of this experiment is to 3) reaffirm that nudges serve as powerful tools in aiding people in the decision-making process; the purpose of the emotional nudge is to trigger the emotional states of consumers. This logically flows into them purchasing a complex health care product that suits the profile of hedging against ultimate uncertainty (an unpredictable event with high negative impact, in which more emergency coverage is strictly preferred to alternative distributions). For the purposes of this study, a pre-questionnaire is taken to stimulate participants. However, there are other ways in which I could stimulate an emotional state, such as showing a short movie clip from a suspense thriller, and thus unconsciously transmit signals of impulse and alarm. Since "'unconscious thought' is useful for making sound

[1] The game of choosing is an art, science, and a lifestyle that everyone should try to learn best they could. Most notably in the field of the limits, art, and improvements of choice are Barry Schwartz, Sheena Iyengar, and Cass Sunstein respectively.

decisions," (Dijksterhuis, 2006, p. 1005) then the transmissions could very well lead to consumers choosing an optimal[2] health insurance plan, for better or for worse. For the default option, also referred to as the 'cognitive nudge', the key extension of decision theory is that people will stick[3] to the paternalistic choice created by the provider. Given unconstructed preferences of health insurance consumers (Brennan & Strombom, 1998, p. 258), this implicitly allows[4] a market for aiding[5] those in choosing these products.

Essentially, this single experiment can be replicated in multiple variations, both in the art of the wording of the options and in experimental procedure. The beauty of this experiment lies in the simplistic nature of only having to make a single trade-off between co-pays and emergency coverage. However, there are many more trade-offs and optimal bundle calculations made when filling out a fully loaded insurance plan that has more than minimal options. A study that could be performed in the future would involve the manipulation of the amount of options presented. For example, having a list of twenty options for one group, and three for another, and then analyzing whether the consumers with more options end up choosing strictly not optimal, non-pareto efficient plans. This theory would hold to satisfaction decreasing as category number increases for those who already know their preferences. (Iyengar & Lepper, 2000; Schwartz, 2004).

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[2] This study assumes that in this experiment, the option-architects are indifferent to whichever plan the consumer hypothetically chooses. Briefly note that in the real world using emotional trigger to manipulate choice could have huge moral implications because insurance companies and consumers of their products have nearly polarized incentives.

[3] Tolerable reasons for why people "stick" can be explained by the plan having momentum from previous years, Bad reasons include loss averse mentality of current endowment, risk aversion since it's risky to choose a plan seemingly not selected by a "wiser" entity, or adhering to the status quo. (Schwartz lecture)

[4] As I currently know of, President Obama's Affordable Care Act doesn't include these nudges, per say. An objective plan like this might leave consumers not knowing what's in their best interest, but it at least gives clarity to the unitary value of the individual (platinum/gold…) plans. If and when people become educated of their options, I believe it will be easier to make an optimal choice.

[5] "Purposefully setting default options is no more paternalistic than taking a laissez-faire approach… setting default options explicitly aims to maximize welfare, ignoring default options leaves welfare to chance." --New England Journal of Medicine, 2007

Yet another extension of this study involves examining the effects of external influence and incentives. Due to the social nature of the way in which information is processed, I believe that an experiment examining the possible effects of a "social nudge" should also be examined specific to health care. Essentially, methods of interpersonal influence from friendship and liking (your friends like a certain health insurance plan) to social validation (other people think a certain plan is correct) can be used to nudge people to select that plan (Cialdini, 2007, p. 199-206). Inferring that purchasing plans in order to assure that less fortunate persons have access to health care is another social mechanism of exerting influence through nudges (Harsanyi, 2013). Providing information in visually effective ways can also nudge consumers towards a particular outcome, such as was the case when Nationwide successfully influenced employees to switch to high deductible plans by presenting visuals showing them how much they would have saved if they were previously enrolled in those plans (Deutschle, 2012).

Finally, when numerous options are available such as is the case in choosing an Obamacare plan after a level has been selected (third decision category), nudges can help consumers choose better through enlightenment and "intelligent assignment" (Thaler & Sunstein, 2009, p. 174). For example, in a case where too many school choices caused parents to make poor selections for their children, a recap was presented to parents summarizing schools' statistics and facts, which led to more appropriate matching (p. 204). Similarly, electronic summary recaps of salient aspects of multiple drug plans available under Medicare part D nudged seniors away from status quo bias and complacency and influenced them to switch plans (p. 175-176). Even more progressively, the State of Maine eliminated random default assignment to drugs plans in favor of a default to "intelligent assignments" that were customized to individuals through analysis of months of each person's historical health data (p. 174). While

some companies invested in developing software to match people with drug plans based upon their medical histories, their efforts were met with skepticism (p. 174). This type of software could greatly aid potential Obamacare plan consumers in narrowing choices, and nudge them away from their inertia, from making poor choices, or from not purchasing a plan at all. In light of the mandate that physicians use electronic medical records by 2014 (EMR, 2013), it does not seem like an unsurmountable task to provide consumers with the nudge of customized "best" selection printouts, obtained by using software that utilizes data from these EMRs (with consent of the consumer).

These examples are just a few of the ways in which experiments can be formed to test how simple techniques and tactics can be used to aid people in making health care choices. Although the demand for nudges in the health care sector is booming, especially with the recent induction of the Affordable Care Act and the associated push to influence people to make purchases in the health care marketplace, I hope that the readers of this paper use the experiment to improve and augment strategic suggestions for all sorts of decision aids ranging from 401(k) retirement plans, to creating nutrition plans, to commitment devices for gym memberships; understanding how subtle (and sometimes not so subtle) effects of nudges could play a massive role in the creation of the next big policy.

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Appendix A

Your Doctor has recommended that you attend the

Premium Diabetic Management Program (1,2,3)

Basic Diabetic management plan:

1. Assessment of patients current diabetic control status and determination if there are associated co-morbidities needing to be addressed such has hypertension and cholesterol
2. Assessment of the presence of complications such as kidney disease, eye disease, nerve disease, vascular disease
3. Assessment of medications, side effects, and interactions
4. Basic plan will include optimizing medication
5. Nutritionist and 1,2,3 diabetic education (not included)

***Premium Management plan**

1. Basic plan (plus)
2. The 1,2,3 diabetic education program which includes access to certified nutritional experts and certified diabetic educations
3. Group classes: 8 hours of intensive diabetic education bringing your knowledge of diabetes to the highest level (shown to improve diabetic control and reduce complications and promote self management)
4. Nutrition hot line (leave your nutrition questions on our dedicated phone line and all your questions will be answered)

[x] YES!! I will attend the recommended Premium Diabetic Education 1,2,3 program to optimize my diabetic control: Date of first class_____

[ ] no. I wish to opt out of the premium diabetic management plan which includes diabetic education and nutrition education and access to the diabetic hot line. I have been informed that diabetic education program not only addresses handling of diabetic hyperglycemic and hypoglycemic emergencies but it also improves blood sugars. Good diabetic control reduces complications such as blindness, kidney disease, loss of limb, and deterioration of nerve function.

_____ _____

Name Date

Appendix B

Questionnaire:	1-Strongly Disagree; 5-Strongly Agree				
Having complete coverage during a personal medical emergency is important to me.	1	2	3	4	5
The costs of emergency medical care without insurance are way too high.	1	2	3	4	5
The peace of mind of knowing that I am insured no matter what the medical emergency is important to me.	1	2	3	4	5
I am strong enough to handle small sicknesses on my own.	1	2	3	4	5
You cannot put a price on life.	1	2	3	4	5