

**THE ETHICS OF PUBLIC HEALTH NUDGES**  
*LIBERTARIAN PATERNALISM AND THE MANIPULATION OF CHOICE*

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Is it possible to influence individual decision-making while preserving freedom of choice?

According to behavioral economists Richard Thaler and Cass Sunstein in their 2008 bestseller *Nudge*, both are possible and legitimate. They coined the term *libertarian paternalism* to describe how behavioral techniques, such as choice architecture and framing, could be used to “nudge” people to choose optimal options that are in their own best interests – without necessarily limiting their freedom of choice. In the field of public health, Thaler and Sunstein’s framework has recently gained widespread attention, particularly with respect to those interventions designed to promote healthy behavior changes. New research indicates that the use of subtle nudges to influence behavior might be more efficacious and better received than blunt control mechanisms, such as bans on illegal drugs, taxes on cigarettes and soft drinks, and mandated vaccinations. In the public health context, however, an underlying issue is whether such nudges are ethical. This paper explores this issue, examining the ethical concerns of nudges and their appropriateness.

### **Public Health: An Intrusive Endeavor**

Public health seeks to protect and promote population well-being. In practice, the discipline comprises specific interventions including preventive programs, health promotion efforts, and sporadic responses to disease outbreaks. By definition, if they are to be effective, public health interventions must intrude into the lives of their target populations (Holland 2014). There are two major types of interventions. The first intends to encourage people to act in ways that will benefit others (or restrains people from causing harm). For example, if herd immunity is threatened, policy might change from a voluntary opt-in system to mandatory vaccination. The theoretical justification for such interventions is John Stuart Mill’s harm principle that “the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others” (Mill 1975, 10). That is, the state is justified in coercing individuals to act in order to prevent harm to others. The second intervention seeks to protect and promote population health for the individual’s sake. Included in this group are health promotion activities that attempt to change people’s behavior to be more conducive to

their wellbeing. In contrast to the first type of intervention, these programs cannot be justified by the harm principle, as “his own good, either physical or moral, is not a sufficient warrant [for exercising power against someone’s will]” (Mill 1975, 15). This presents an ethical dilemma: achieve public health goals by prodding individuals to act in their own best health interest, but at the expense of liberal values (such as personal liberty); alternatively, preserve liberal values, but at the expense of public health gains that would be achieved by public health paternalism (Beauchamp 1985).

As proposed by Thaler and Sunstein, *libertarian paternalism* is the idea that it is acceptable to shape the context in which people make choices so that they are nudged to make decisions that would be better for them, while still “preserving their liberty of choice” (Thaler and Sunstein 2008, 5). In other words, this strategy is *libertarian* because it is relatively “hands-off,” tinkering with the options from which people can choose rather than interfering with the choices themselves, and it is *paternalistic* because its goal is to help individuals make better decisions than they might not make on their own (White 2013, xiii). Proponents of libertarian paternalism contend that nudges, therefore, can be used to help people act in their own best interests while respecting their right to self-determination.

### **Nudges in Public Health**

By way of background, Thaler and Sunstein claim that people tend to make poor choices. The reason for suboptimal decision-making is that individuals are subject to irrational influences rooted in behavioral economics and psychology (Thaler and Sunstein 2003). Specifically, they cite how people are susceptible to various cognitive biases, namely choice architecture and framing. Choice architecture describes how the design of choices impacts consumer decisions (e.g., an opt-out 401(k) program leads to greater participation than an opt-in savings plan). Choice framing indicates that people react to a particular choice in different ways depending on how the choice is presented (e.g., more people will eat ground beef that is labeled 90 percent lean rather than 10 percent fat). Nudge theory proposes utilizing these biases to achieve non-forced compliance and sway how individuals make decisions.

Historically, many public health interventions have been criticized for being too coercive, especially in the United States where patient rights and autonomy are deemed paramount. For example, illegal drug bans, removal of unhealthy foods in school cafeterias, tobacco and soft drink taxes, and mandated vaccinations, have all faced political resistance (Hanks et al. 2014; Buchanan 2008; Bayer and Fairchild 2004). As a result, many recent public health initiatives designed to stimulate behavior change have started to capitalize on choice architecture and framing; using them as a subtle nudge to influence behavior might be more effective and better received than more coercive mechanisms. A general example of choice architecture is either asking people to choose whether they want to donate organs (and requiring a response) or, more directly, defaulting peoples' preferences to donate organs unless they opt-out. Specifically, in 2008, Illinois changed the requirements for driver license renewal mandating that drivers check a box stating organ donation preferences. Early results of this "mandated choice" program have almost doubled the number of organ donors (Thaler and Sunstein 2008, 182). Many European countries have also adopted an opt-out system in which everyone is automatically an organ donor unless someone states otherwise. Not surprising, the percentage of organ donors in these countries is far higher than in the United States. With regards to choice framing in medicine, patients are more likely to choose a medical treatment that is presented as having a 90 percent chance of success than one presented with having a 10 percent chance of failure (Tversky and Kahneman 1981). These are only a few examples of the ways in which choice architecture and framing might be used to nudge behavior change. The question arises, however, whether such covert mechanisms are ethical.

### **The Unavoidability of Nudges**

Proponents of libertarian paternalism argue that individuals are not always effective at making choices to maximize their own welfare (Thaler and Sunstein 2003). Therefore, it should be both ethical and desirable for the government and medical systems to use certain unobtrusive mechanisms to encourage individuals to make choices that would improve their lives. Moreover, cognitive biases are unavoidable, and options have to be presented in some way or another, and whichever way they are

presented will influence a decision. Accordingly, it is justifiable to induce people to choose what is in their own best interests. As presented by Thaler and Sunstein, a well-known nudge example that has been implemented involves a cafeteria layout. Customers' food choices are susceptible to irrational influences, such as the order in which items are presented (e.g., they are more likely to choose options placed closer to hand). In light of such proclivities, the cafeteria planner could: (1) present food choices she thinks would make the customers healthier, (2) present food choices at random, or (3) prioritize profits and possibly maliciously present food items that would yield the most income yet cause obesity. The authors claim, based on these three alternative strategies, no one would advocate for options (2) or (3) (Thaler and Sunstein 2003: 2).<sup>1</sup> Therefore, since there will always be unavoidable influences, planners should be paternalistic while simultaneously allow individuals the liberty to pursue goods and values other than those towards, which they are being nudged.

Additionally, in the context of public health, advocates of libertarian paternalism also invoke the moral theory of consequentialism (Petrini 2010). According to this framework, the right action is the one that leads to the best outcomes. Because it is impossible to avoid influencing choices, when it comes to public services and healthcare, then surely that influence should be applied in ways that lead to better outcomes for the individual because by its definition, public health seeks to improve the well-being and health of all individuals. Finally, public health behavior interventions geared towards individual well-being will indirectly benefit society as a whole. Reducing obesity, for instance, has a societal benefit of lowering overall healthcare costs. Public health nudges may thus be justified and pursued because the consequences are improved individual and societal health.

### **The Manipulation of Choice**

Currently, the literature accepts libertarian paternalism and nudge theory in public health, as the theory encourages decisions that will lead to healthier, thus better, outcomes, while preserving individual

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<sup>1</sup> While (2) could be considered fair-minded and neutral, it would be frustrating to customers and staff who would not know the approximate location of foods (similar to if there were no organization of supermarket aisles).

freedom of choice. Indeed, Mill himself was amenable to influencing others' decisions through "reasoning," "persuading," and "entreating" (Mill 1975, 54), provided that each individual ultimately is at liberty to choose. Nevertheless, it is valuable to consider the various ethical counterarguments against such techniques. First, one must define what makes an action voluntary. According to philosopher Joel Feinberg in his 1986 book *Harm to Self*, voluntary choice depends on the fulfillment of the following five conditions:

- (1) The chooser is competent;
- (2) not under coercion or duress;
- (3) not subject to subtle manipulation;
- (4) his choice is not due to ignorance or mistaken belief; and
- (5) he does not choose in circumstances that are temporarily distorting [including impulse, fatigue, and overwhelming emotion] (Feinberg 1986, 115).

Feinberg claims that public health paternalism only can be justified if the consequences of an individual's actions are dire. For example, a physician can (and should) instruct a patient not to take medication over a certain dosage, as it would be toxic to the patient beyond a certain point.

In the majority of cases, however, it is impossible for an onlooker to determine the consequences of a decision (positive or negative) without knowing the patient's own interests. For example, the consequences of overdosing on a medication are extreme and immediate compared to the consequences of nudging someone to eat an apple instead of a donut. An individual might eat a donut for reasons unrelated to health, and long-term consequences would only arise from prolonged unhealthy eating. And, often times, nudges are used in those similar contexts in which the consequences of the behavior are relatively minor and delayed (Cabinet Office Behavioral Insights Team 2010). This is a slippery slope, though, and it is easy to override Feinberg's conditions on voluntariness for virtually anything that could slightly hurt one's health (Rizzo and Whitman 2009). From this vantage point, nudges appear unethical because they encourage only certain choices.

If libertarian paternalists act to promote a person's true self-interest, they should evaluate the decision-making process itself. This is consistent with Feinberg's standards of voluntariness that are based on a person's decision-making *process* rather than the decision itself and its outcome (White 2013).

Sunstein and Thaler are not concerned with discerning the plethora of other interests that might lead individuals to rationally and voluntarily defer or decide to act; instead, they are concerned with what individuals should do by a defined metric, which, in public health, is the “healthiest” option. An individual’s choice to eat a bag of chips instead of a carrot is evidence of irrationality and justifies paternalistic intervention to correct such an involuntary bad choice. This is disguised paternalism: pretending to judge the voluntariness of people’s decision-making process, but really questioning their choices and their interests.

By definition, nudges are not explicit and do not coerce actions. Instead, nudges are subtle rearrangements of options meant to steer people toward a presumptively better choice than the choice they would have made otherwise. For this reason, libertarian paternalism proponents do not deem nudges coercive. However, philosopher Gerald Dworkin states that paternalism involves “a usurpation of decision-making, either by preventing people from doing what they have decided or by interfering with the way in which they arrive at their decisions” (Dworkin 1988, 123). Indeed, because nudges by their very nature are designed with the express purpose of manipulating people’s decision-making processes so that they change their behavior, one could argue that nudges are masked coercion – they exploit cognitive biases and heuristics to steer people towards particular choices.

To illustrate, consider the case of a doctor treating a terminally ill patient who has requested a risky operation that, if successful, would add a couple months to her life. The doctor does not think the operation is worthwhile for someone in the patient’s condition, but the patient insists on having it since there is a chance she might live a little longer. In the hopes of convincing the patient to make the choice the doctor thinks is best, the doctor decides to negatively frame the operation, citing only the risks of failure and complications. After hearing this negative information, the patient agrees to forgo the operation. The patient made her decision freely in the sense that no one forced her to decline the operation. But it is fair to say that the doctor, with his choice framing supported by authority and patient trust, manipulated the patient’s decision. The doctor may have had the patient’s best interests (as he judged them) at heart, but he violated his patient’s autonomy, one of medical ethics core tenets.

Worthy of consideration are the unintended consequences of using nudges as well. Consider how multiple cafeterias now have traffic-lights (green = “nutrient-rich”, yellow = “less nutrient-rich”, and red = “more nutrient-rich choice in green or yellow”) and calorie counters (Seward et al. 2016; Thorndike et al. 2014; Olstad et al. 2015). In many of these cited studies, there was no consensus that such choice framing significantly altered food purchases. Yet, there was statistically significant evidence that the labels negatively impacted students with eating disorders (Seward et al. 2018; Haynos et al. 2017). While individuals still could choose their food as before, the choice framing made them feel that certain choices were being judged (the goal of the planners). This feeling of judgment had adverse effects on students with eating disorders and affected their well-being. This contradicts the goal of public health – to improve health for all individuals – and thus such unintended consequences associated are worthy of consideration, and further call into question the ethical underpinnings of nudges that may sometimes lead to more harm than good.

### **Usurping Autonomy**

Autonomy – the ability of each person to decide his or her own interests and make choices in pursuit of those interests – is antithetical to paternalism (Mill 1975, 15). By its very nature, paternalism denies autonomy in two ways: by substituting another’s idea of a person’s interests for that person’s own, and by blocking or manipulating choice to promote the interest imposed by the paternalist. Attempts to interfere with an individual’s autonomy that are “justified by reasons referring exclusively to the welfare...of the person being coerced” exemplify paternalism (Dworkin 1972, 74). At any given time, there are in fact competing interests beyond health that motivate actors. Someone, for example, might wish to indulge in ice cream, perceiving it to be an aphrodisiac. Yet, to libertarian paternalists, people are oversimplified and one-dimensional, responding uniformly to external stimuli (Verweij and Hoven 2012). As a result, their responses need to be adjusted and fine-tuned, so that they behave as they should *for their own good*, as defined by the regulators. The mindset goes a long way toward explaining the jump from

“sometimes people make bad choices” to “we can and should help them make better ones.” With this in mind, nudges usurp individual autonomy.

Autonomy was a key concern of another philosopher, Immanuel Kant. He believed that subtle deception and coercion subverted autonomy, specifically by using people as “tools” for another person’s plans (Kant 1993, 429), denying them the right to consent. Under these conditions, nudges negate the ability to give informed consent. Ideally, a person who wants another’s cooperation would try to persuade the other person, appealing to his or her judgment. As philosophers Dan Hausman and Brynn Welch write: “Rational persuasion respects both individual liberty and the agent’s control over her own decision-making, while, in contrast, deception, [by] limiting what choices are available or shaping choices, risks circumventing the individual’s will” (Hausman and Welch 2010, 130).

Let’s return to the example of the terminally ill patient who is dwelling on the advantages and disadvantages associated with an operation. The patient trusts her doctor to give unbiased risk information, and the doctor relies on this trust to subtly manipulate the patient’s choice toward his desired ends, however benevolent they may be, by framing the patient’s options in a particular manner (for instance, only listing risk statistics of the operation, such as worst-case scenario of death or coma). To look at it from the patient’s perspective, she has no opportunity to consent to her physician’s goal (to have his patient not undergo the operation) because she is unaware of it, and she is subject to her doctor’s subtle playing on her fears (regardless of his sincere and benevolent intent). The coercive aspect of libertarian paternalism engenders nudges that steer people toward making choices to promote interests that may or may not coincide with their own, but rather the choices align with the paternalists’ idea of what those interests *should* be.

While humans act irrationally, libertarian paternalists nevertheless invoke the theory of “hypothetical consent” to justify nudges that seek to promote good decisions (Thaler and Sunstein 2003). More specifically, if people were rational – fully informed, free of cognitive biases and heuristics, and calm of mind – they would make the choices they are being nudged to make anyway, so libertarian paternalists assume that people would consent to the interventions *if* they were fully rational. But this

approach is just as questionable as the concept of “rational preferences” because the prototypical rational person does not exist. As Dworkin writes, hypothetical consent “is not actual consent that remains unexpressed. It is simply a judgment about what the agent would have agreed to under certain circumstances” – a judgment made by a libertarian paternalist based on his or her ideas of what people should prefer (Dworkin 1988, 88). If consent is desired, it must be actual, not hypothetical; in the words of philosopher Onora O’Neill, “the morally significant aspect of treating others as persons may lie in making their consent or dissent *possible*, rather than in what they actually consent to or would hypothetically consent to if fully rational” (O’Neill 1989, 110). Therefore, even if libertarian paternalists had information about people’s real interests and designed nudges to promote them, the nudges would still be coercive because the people would be unaware of the regulator’s true ends (even if they coincided with their own) and, therefore, they could not give informed consent.

By relying on cognitive biases and unconscious anomalies in decision-making, nudges are designed to change behavior. The fact that nudges rely upon our decision-making deficiencies to alter decisions toward those that support other interests contributes to the case for coercion (White 2013). And there need be nothing deceptive about the nudge itself – changing a default choice and the arrangement of options does not disguise/hide anything from the decision-maker – but the goals or ends of the nudge are often hidden, and the cognitive biases they rely on are rarely made clear.

### **Can Nudges Be Ethically Justifiable?**

In public health, a common tension exists between the pursuit of public health goals and individuals’ liberty and autonomy. Nudging people to make healthier choices seems like a promising way to resolve this tension insofar it seeks to fulfill both objectives. Similarly, public health is often criticized for prioritizing health at the expense of other components of well-being (Wilkinson 2009). The nudge addresses this criticism by enabling people to develop their own priorities. However, public health is beset by epistemic uncertainty. Uncertainty is endemic, including whether a program, for example, will achieve its stated goals of reducing mortality rates or the incidence of disease, coloring the

appropriateness and ethicality of nudges. People may be prodded against their will (by exploiting human frailties) for something with limited health benefits.

The more clinically uncertain an intervention is, the more nudges appear inappropriate and unjust. For example, consider prostate specific antigen (PSA) screening for prostate cancer in the United States. Wheeler et al. (2011) describe how physicians in the United States often use nudges to promote PSA screening, spurring its use at a rate far higher than in other parts of the developed world. Specifically, many physicians and professional organizations encourage older men to receive the screening (currently, Medicare provides coverage for an annual PSA screen for Medicare-eligible men 50 and older and most private insurers cover PSA screening as well) (National Cancer Institute 2017). Others frame the benefits and drawbacks positively (e.g., 55 percent chance of no complications as opposed to 45 percent of difficulties).

Yet, there is currently much uncertainty surrounding the benefits of PSA screening. This uncertainty arises at both the population and individual levels: At the population level, the best evidence as to whether PSA screening reduces rates of mortality is unclear; at the individual level, screening can result in overdiagnosis and overtreatment which, in turn, cause serious unnecessary harms to individual patients, including incontinence and impotence (Andriole et al. 2009; Schroder et al. 2009). Therefore, given such clinical uncertainty, is it ethical to use libertarian paternalist strategies to promote PSA screening? Knowing the high risks and drawbacks of PSA screening, a patient's decision to be screened does not appear voluntary. Even if the physician had the patient's best interests in mind, it is hard not to feel that the patient was subtly deceived into engaging in a procedure that has no clear evidence of improving quality of life or reducing mortality of prostate cancer.

But compare to an example where there is more clinical certainty. Is it ethically justifiable to use nudges in these instances, and if so, why? Consider HIV opt-out testing. A recent research study focused on mandated HIV testing in sub-Saharan Africa. In this study, Michael April (2010) advocates shifting from an opt-in to opt-out system of testing. Such a system would nudge people towards getting tested by reframing the choice (specifically, by resetting the default), while leaving them free to decline the test.

While HIV testing has a great deal of clinical certainty,<sup>2</sup> it is worth noting that April's application of libertarian paternalism has a good deal of uncertainty, too, just of a different type. Specifically, the uncertainty shared by the two cases is that the seemingly optimal option might prove detrimental: for instance, the PSA patient might suffer the consequences of unnecessary treatment; finding out one's HIV status might result in social exclusion. Should this uncertainty bar the use of HIV opt-out testing despite its potential gains?

The crucial difference, however, is that in the HIV case, the two testing strategies – opt-out versus opt-in – are equally uncertain because there is as much chance that nudging an individual to get tested will prove as detrimental as nudging an individual not to get tested. Social consequences (notably, stigmatization) might outweigh the benefits of early diagnosis (treatment) for an individual nudged to get tested; but equally, foregoing the benefits of early diagnosis might outweigh avoiding the social costs of a positive test result for individuals nudged to avoid testing. When the options are weighed this way, population perspective decides the issue (Holland 2014, 348). The nudge is justified despite uncertainty at the individual level because there is clear evidence that opt-out testing achieves public health gains foregone by alternative testing strategies, namely decreased mortality due to HIV.

The uncertainty surrounding PSA, therefore, is of a different sort. There is uncertainty as to what is in an individual patient's best interest, and more importantly, there is no clear evidence at the population level as to which of alternative screening programs and policies achieve public health gains. Thus, unlike in the HIV case, adverting to the population level will not resolve the uncertainty surrounding PSA. This ethically justifies that the nudge theory be applied to HIV testing instead of PSA screening. Many people living with HIV do not do opt to be tested (De Cock 2003; 2002), and many experts suspect that an opt-out policy could promote the survival of millions of individuals throughout sub-Saharan Africa (April 2009; De Cock 2006).

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<sup>2</sup> Early discovery of HIV status and immediate initiation of treatment has been proven to lower mortality (Walensky et al., 2008).

## **Navigating Public Health Ethics**

Since the turn of the century, many public health programs have begun to unilaterally embrace nudge theory without much thought of ethical compromises (Marteau et al. 2011; Oullier and Sauneron 2010; Cabinet Office Behavioral Insights Team 2010). Yet, the PSA screening example highlights how libertarian paternalism in public health may be unethical. In contrast, the HIV opt-out system demonstrates how nudge theory may be more appropriate and ethically justified in public health. The juxtaposition of these case studies indirectly raises the issue of how much clinical certainty is necessary to ethically justify a nudge. It also begs the question at what threshold should such techniques be actively pursued and implemented in public health interventions, especially those that seek to help individuals themselves (as opposed to prevent harm to others)? For public health to remain true to itself as a discipline that thinks critically about both its means and ends, it is imperative that it reflects on libertarian paternalism and attempts to clear any ambiguity insofar as the appropriateness of nudges for behavioral change campaigns.

First, public health officials must recognize the strengths and weaknesses associated with the use of nudges, namely, subtle manipulation to steer populations in particular health trajectories. To remain ethical, they must design behavior change programs that strive to meet the following four conditions:

- (1) respect the choices made by people;
- (2) hold individuals accountable and responsible for the consequences of those choices;
- (3) make sure they are not doing anything that would discourage good decision-making; and
- (4) take careful and neutral actions to promote as informed decision-making as possible.

Public health policymakers and physicians must also be transparent in their goals. Such transparency will help affected individuals become more aware of their actions and cognitive biases, augmenting their informed consent.

Second, it is vital for public health officials and physicians to openly discuss when such nudges should be actively implemented in interventions and in shared decision-making. In a field laced with much clinical uncertainty, there must be established thresholds that decide when something (a treatment, vaccine, diet, etc.) is good for someone and actively promoted in public health interventions and

recommendations. This will ensure that the nudge will lead to the best possible outcome for the individual. Moreover, training should be given to medical professionals to make them aware of how they may subtly influence their target populations and present facts that could be misleading.

Moving forward, behavioral economics and social science will continue to play a large role in public health as policymakers develop new and better ways to reach target populations. It is important that ethicists continue to question new techniques and determine how to best maintain individual autonomy even while promoting good health. What is the threshold for *overwhelming* clinical certainty that could justify libertarian paternalist mechanisms of inducing behavior change in all circumstances? Is it indeed possible to interfere with individual decision-making while preserving freedom of choice? When people's values are being undermined for the sake of the planners' version of "best interests," does a nudge become a shove (Menard 2010)? Libertarian paternalism will continue to serve a role in the public health toolbox of techniques, and it constitutes a valued addition to the system of metrics that we have used to judge public health ethics. It is time for an honest conversation about ways it can and should fit in interventions and whether it is ethically more or less sound than more historic and conspicuous forms of paternalism.

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