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Fairness and wellness incentives: What is the relevance of the process-outcome distinction?

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ABSTRACT

Objective. To determine whether the commonly drawn distinction between the fairness of incentives targeting behavioral processes (or effort) and those targeting outcomes (or achievement) provide suitable grounds for favoring either approach in healthcare research, policy and practice.

Methods. Conceptual analysis, literature review.

Results. A categorical distinction between process- and outcome-based incentives is less crisp than it seems. Both processes and outcomes involve targets, and both are subject to differences – across and within socio-economic groups – in circumstance and perspective. Thus, a spectrum view is more appropriate, in which the fairness of incentive programs increases with the extent of control that people have. The effectiveness of incentives is a further relevant consideration, and some available evidence suggests that incentives closer to the outcome-end of the spectrum can be more effective.

Conclusions. Simple distinctions between processes and outcomes by themselves provide little assurance that programs are effective or fair. Effectiveness can and should be assessed empirically. Assessments of fairness should focus on the extent to which an activity or outcome might be feasible and under an individual's control, not on whether it targets a process or outcome. Rigid uniform targets for all are generally less desirable than those that reward person-specific improvement.

Introduction

Interest in health incentives has increased considerably over recent years. As we will outline below, major drivers include insights from the emerging field of behavioral economics, empirical studies in a wide range of health-related areas, and legal reforms that have given employers the option of increasing substantially the monetary value of incentives used in the workplace setting. Employers can find incentives attractive for the same reasons that appeal to health professionals, since they too are typically interested in health promotion. But employers also have interests that go beyond health improvement, as poor employee health typically reduces productivity and increases health care cost. In the best case, incentive programs succeed in promoting health, controlling health care cost, reducing absenteeism, and improving productivity. However conflicts between these goals are also possible, and health promotion may not always be paramount. A key issue for incentive programs in both clinical practice and public policy relates to what activity or goal is being incentivized, and how that influences the programs' fairness and effectiveness.

It is often argued that incentives targeting behavioral processes (for example, efforts to lose weight) are more fair than those targeting outcomes (for example, success at losing weight), and legal and policy distinctions have been drawn along corresponding lines (2010 Patient Protection and Affordable Care Act, ACA, Sec. 2705; Madison et al., 2011). We argue here that the distinction between process and outcome is far less clear than it seems—less clear in defining what a process is and what an outcome is, and less clear in the moral interpretation of those two incentive triggers. We seek to show that the divide between process and outcome is ambiguous because all incentive programs involve targets. We argue that with regard to fairness, the focus should be on how much control individuals have in achieving these targets, which requires a due consideration of the extent to which social circumstances and other constraints bind our actions. We conclude that we should replace or at least supplement a categorical distinction between process and outcome with a continuum view based on the extent of individual control. While this view might lead some to argue for an abandonment of incentives at the outcome end of the spectrum in favor of those closer to the process-end, we caution against this and point to evidence that suggests that this strategy risks sacrificing programs that have been shown to be more effective. Other metrics, such as the effectiveness of programs and the availability of alternate standards for success are therefore also relevant moral considerations.

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We begin with a brief outline of the approach of behavioral economics that underpins much of the current incentive research. Next, we summarize the salient ethical issues regarding the use of incentives to promote health, and provide background on the policy context. We then consider in more detail conceptual and empirical problems of the process-outcome distinction, and conclude with recommendations for policy and future research.

Background: The behavioral economics rationale for using incentives in health care

The classical *homo economicus* model holds that people are self-interested rational agents who are generally able to identify the means necessary to achieve goals worthy of pursuit, and to act accordingly. The case of health behavior, along with other situations, such as retirement planning, challenges this assumption. Even though the desire to lose weight, to drink less or to stop smoking is felt strongly by many, many also fail in acting on it, despite being quite clear about the means that are required, such as eating less, and exercising more. The reasons can be manifold and are often to do with people's specific circumstances in life. Chemical addictions can also play a role. In addition to these and further circumstances there appear to be powerful psychological constraints that can have a grip on people's ability to change their behavior.

Researchers in the field of behavioral economics have begun to systematically map these constraints. The concepts of present preference bias and quasi hyperbolic discounting have been coined in response to a series of experiments demonstrating that people generally prefer tangible rewards in the present or near future to ones that are less certain and likely to materialize at a much later stage (Frederick et al., 2002; Laibson, 1997; Madden et al., 1997). In other words, the pleasure of an extra helping of cake today will often be preferred over the pleasure of being healthier later — even if one's future self would prefer the alternative. The underlying mechanisms that often lead to inertia and procrastination can, however, be turned around by exploiting the very principles that fuel them, for example, by providing immediate feedback and rewards for behavior change. A further important concept established in observational and experimental research relates to loss aversion (Kahneman and Tversky, 1979). What is meant here is that people disproportionately prefer avoiding losses to making gains (of equivalent value). These and other principles of behavioral economics (Loewenstein et al., 2007) have been applied successfully in many health care areas and produced measurable, tangible benefits using incentive programs that include fixed sum discounts, cash rewards, lotteries, or deposit contracts in areas such as medication adherence, smoking cessation, weight loss or substance abuse management (DeFulio, 2012-this volume; Giuffrida and Torgerson, 1997; Higgins et al., 2012-this volume; Jeffery, 2012-this volume; Lussier et al., 2006; Paul-Ebhohimhen and Avenell, 2008; Volpp et al., 2006, 2008b, 2008c, 2009b).

Ethical issues

Despite these benefits, the use of incentives is controversial. The ethical discussion is closely linked to the broader debate about the role of personal responsibility for health, conceptions around deservingness and entitlement, and the appropriate scope and limitations of health insurance (Blacksher et al., 2010; Gollust and Lynch, 2011; Hoffman, 2011; Lynch and Gollust, 2010; Schmidt, 2009a). Ethical arguments favoring and critiquing incentive programs rest on the specific design features of programs and require a case-by-case assessment. Here we provide a brief general overview of some of the key considerations.

Those who support the use of incentives in principle generally point to evidence that these programs often work (Halpern et al., 2009). They also note that in addition to improving health of individuals, programs may help reduce health disparities at the population level (Oliver and Brown, 2012; Schmidt, 2009b). Some also accept imposing penalties on individuals for failing to achieve certain targets aimed at cost containment and health promotion, as long as suitable opportunities for behavior change are provided (Pearson and Lieber, 2009). Opposition to incentive programs takes several forms. One general objection is that the focus on individual-level behavior is misguided, and that instead broader population-level approaches should be pursued: for example: free screening programs, legal limits on fat, salt, and sugar-levels in foods and drinks, restrictions on advertising and availability of tobacco and alcohol, or improved access to safe and affordable exercise facilities. These initiatives are often regarded as more efficient and fair (Blacksher, 2008; Daniels, 2007; Minkler, 1986; Raikka, 1996; Resnik, 2007; Wikler, 2004). A similar charge is that incentives may become the sole reason for action, thereby undermining or crowding out intrinsic motivation (Frey and Oberholzer-Gee, 1997), agency or patient autonomy (Ashcroft, 2011). In a broader sociological perspective incentives could also be seen as part of the paradigm of 'healthism' in which "good health has become a new ritual of patriotism, a marketplace for the public display of secular faith in the power of the will" (Levin, 1987; Steinbrook, 2006).

There is also concern that health incentives can unduly penalize people for poor health (Bishop and Brodkey, 2006), and recent experimental work suggests that "financial incentives, whether rewards or penalties, are judged as less acceptable than medical interventions" (Promberger et al., 2011: 4). Others note that it can be difficult to treat like cases alike: if we impose penalties on smokers or the obese on the grounds that their behaviors lead to avoidable harm, should we not do the same in other cases, such as poor dental hygiene, excessive sun exposure, unprotected sex, high-risk sports, or stressful careers? Deciding which risks are worthy of intervention can appear arbitrary (Wikler, 1978, 2004).

Several ethical frameworks have addressed these broader issues (Halpern et al., 2009; Madison et al., 2011; Schmidt, 2008, 2012). Here, we focus on the narrower distinction between process and outcome-based incentives, which itself raises questions around voluntariness, coerciveness and discrimination (Halpern, 2011; Madison et al., 2011; Schmidt et al., 2010; Voigt, 2010).

Process and outcome incentives: The policy context

Current law and policy distinguish between incentive programs that require "satisfying a given standard that is related to a health status factor" and those that do not (ACA, Sec. 2705). Health status standards include achievement of a specific Body Mass Index (BMI) or level of cholesterol, or demonstration of being a non-smoker. In contrast, the ACA lists the following five examples of incentive programs that do not involve a standard related to a health status factor (1) full or partial reimbursements of the cost of memberships in a fitness center; (2) a diagnostic testing program, as long as incentives are not tied to particular results; (3) waivers of otherwise applicable copayments or deductibles for using preventive care such as prenatal care or well-baby visits; (4) cost of smoking cessation programs, irrespective of whether employees quit as a result or not; and (5) incentives for attending health education seminars. Various terminologies have been used to reflect these two approaches, though none captures the distinction perfectly. Some have used the terms "attainment-incentives" and "participation-incentives" (Schmidt et al., 2010), others, in related contexts, speak of incentivizing "outcomes" and "outputs" (Musgrove, 2010). Here, we will refer to the distinction as being between programs that focus on satisfying ACA standards as outcome incentives, and to those that do not as process incentives (Halpern et al., 2009; Madison et al., 2011).

The impact of this distinction is instantiated in US regulations that do not limit the size of process incentives, but initially specified that employer-based outcome incentives must not exceed 20% of the cost of an employee's coverage. This policy, enacted in 2006, was intended