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## Incentives in Health: Different Prescriptions for Physicians and Patients

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## Incentives in Health: Different Prescriptions for Physicians and Patients

### Abstract

Financial incentives abound in health care. They are found in the ways physicians are paid and in the ways health insurance coverage, co-payments, and deductibles are structured for patients. The effects of these incentives are often understood through conventional economic principles, with the assumption that individuals are self-interest maximizers who respond directly to changes in incentives. In contrast, behavioral economics imports insights from psychology and recognizes that individuals often do not respond to incentives as rationally as they might. In some cases, individuals lack information, but in others, they just seem to act contrary to their own known interests, for example, when they overeat, fail to take medication, or neglect to wear seat belts.

### Disciplines

Chemicals and Drugs | Pharmacology, Toxicology and Environmental Health

# Incentives in Health

## Different Prescriptions for Physicians and Patients

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**F**INANCIAL INCENTIVES ABOUND IN HEALTH CARE. THEY are found in the ways physicians are paid and in the ways health insurance coverage, co-payments, and deductibles are structured for patients. The effects of these incentives are often understood through conventional economic principles, with the assumption that individuals are self-interest maximizers who respond directly to changes in incentives. In contrast, behavioral economics imports insights from psychology and recognizes that individuals often do not respond to incentives as rationally as they might. In some cases, individuals lack information, but in others, they just seem to act contrary to their own known interests, for example, when they overeat, fail to take medication, or neglect to wear seat belts.

Although sometimes caricatured as focusing exclusively on human irrationality, behavioral economists recognize that rationality is dependent on the person and the specific situation. Individuals tend to be more economically rational when they are well educated, have good information about alternatives, make similar decisions repeatedly, receive clear and rapid feedback on the consequences of those decisions, and have the time and emotional distance to make decisions in a deliberative and dispassionate fashion. Individuals tend to be less economically rational when they are less educated, lack relevant expertise, do not receive feedback about the decisions they make, and make decisions rapidly and under the influence of strong emotions. This dichotomy is relevant to informing thinking about the role of incentives in medicine, particularly when considering how to reduce widespread overuse of low-value services.

There is ample evidence that physicians, who typically fulfill the criteria for being economically rational, are exquisitely sensitive to the incentives they face. Physicians tend to recommend tests and treatments that will provide them with financial benefit. For example, oncologists who are reimbursed based on the chemotherapy drugs they provide administer more of these drugs and concurrently, the more expensive drugs.<sup>1</sup> On average, compared to physicians paid on a capitated basis, physicians paid for specific procedures tend to recommend more of those procedures.<sup>2,3</sup>

Clearly, if the US health care system is to improve the value of health care spending, it will have to do so, in part, by exploiting this very rationality of physicians and by moving away from payment systems that contribute to excess use of high-cost, low-value services.

Patients using health care services face a situation starkly different from that of physicians. Patients tend to face idiosyncratic health issues, get relatively little useful feedback about the quality of medical decisions, and often make decisions when sick and, as a result, in a heightened emotional state. Perhaps not surprisingly, therefore, the behavior of patients can be less than perfectly rational. It is difficult for a patient who is ill and vulnerable to balance the costs and benefits of alternative tests or treatments in a rational, dispassionate fashion. These decisions are difficult enough when patients are feeling well, as can be seen from studies of health insurance decisions, which reveal that many patients often do not choose insurance policies that provide the most extensive coverage at lowest cost.<sup>4</sup> This is not to say that patients are entirely irrational; for example, as classical economic theory predicts, once patients meet their insurance deductible amount, their readiness to use health care services increases.<sup>5</sup>

What are the implications for health policy of the greater degree of rationality displayed by physicians relative to patients? First, attempts to address issues of overuse of low-value services should focus mainly on physicians rather than patients. Insurance payments for services of low value should be reduced. Given the fiscal consequences of poorly controlled health care spending, it makes no sense to pay just as much for services or procedures that are unnecessary as those that are life saving. This approach need not affect physicians adversely; lower payment for low-value services could be coupled with higher payment for high-value services in situations of underuse of those high-value services.

At the same time, however, physician incentives must be implemented carefully. Broadly based incentive schemes,

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such as capitated payment or fee for service, are blunt. Both can perversely create unwanted results—too much care in the case of fee-for-service medicine, and too little in the case of capitation—with little regard to value. Although incentive schemes can be made more complicated in an effort to motivate desired and narrower patterns of practice, those that are overly complicated are less likely to be effective.<sup>6</sup> Moreover, research in psychology and behavioral economics shows that monetary incentives can crowd out nonmaterial motivations such as those inherent in the desire to conform to professional values.<sup>7</sup> Financial incentives are not meant to replace intrinsic professionalism, but no system of reimbursement is incentive neutral. Incentive systems are needed that are generally successful at achieving intended consequences without creating new problems.

Second, although patients may be less ideal targets for incentive programs in general, consideration of who responds well to incentives and when suggests areas in which they might be more or less constructively applied.

One straightforward implication of the greater rationality shown by individuals facing repeated decisions is that the role of patient cost sharing should be different in the setting of chronic illnesses than in the setting of acute illnesses. Patients with acute conditions are likely to confront unfamiliar and emotional decisions and are therefore not appropriate targets of cost-sharing incentive programs that require a dispassionate evaluation of costs and benefits. In contrast, higher cost sharing for low-value services can make more sense for patients with chronic conditions who are more likely to face similar decisions repeatedly. Although studies of reduced cost sharing for medications based on the value of medications find disappointingly small improvement in adherence at a relatively high cost (few patients who would not have otherwise taken the medication take it, but many who would have taken it at the original cost receive a discount),<sup>8</sup> studies of increased cost sharing consistently observe large reductions in utilization.<sup>9</sup>

A second implication of limited rationality on the part of patients is that incentive programs targeting patient health behaviors should be carefully designed. Section 2705 of the Patient Protection and Affordable Care Act expands, to 30% of total premiums, the proportion of employee health insurance premiums that can be conditioned on health outcomes assessed by biometric measures such as low-density lipoprotein cholesterol, blood pressure, body mass index, and smoking status. A key question for these provisions, about which there are limited data, is how much the behaviors these indicators measure can be modified through premium-based health incentives. Employees who smoke or are obese, who will end up paying the highest rates, tend to be the poorest, leading to a situation in which the most disadvantaged individuals and families will pay the highest

insurance premiums. The effect of incentives for behavior change can be enhanced by implementation that accounts for and leverages irrationalities in decision making; in other words, while adjusting the prices of insurance will likely have some influence on behavior, the effects achieved could potentially be greater if the underlying psychology of decision making is considered in the design.<sup>10</sup> If premiums tied to outcomes succeed in making individuals healthier at high rates, the health benefits may justify the increase in regressivity, but programs will need to be designed carefully to increase the likelihood that they will have a positive effect on behavior.

There is an expression in economics: “There are no bad people, only bad incentives.” Incentives have been and will continue to be an inevitable part of health care financing and can be used to increase the value health care spending provides in improving health. But to achieve intended goals, while minimizing unintended consequences, the design and implementation of incentives should consider how patients and physicians respond to these incentives and how they respond differently in different circumstances.

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