It is hard to think of a study that is more definitive, ostensibly valid, practical, or relevant to public health than that reported by Tim Weaver and colleagues in *The Lancet*. Their study addressed the global problem of how to reduce the spread of hepatitis B virus (HBV) by drug users, and in particular the practical problem of increasing full compliance with the recommended regimen of three HBV vaccinations spread over a 3 month period. In a cluster randomised trial done in the UK, the investigators showed that modest, contingent financial rewards significantly increased the likelihood of completion of all HBV vaccinations in this difficult to access and high-risk group. Provision of £30, delivered either in equal or graduated instalments in return for as-scheduled attendance for the three injections, raised the rate of full adherence from 9% (six of 67 participants) in the treatment-as-usual group to more than 45% in the contingency management groups (35 of 78 [45%] and 32 of 65 [49%] participants receiving fixed or escalating value rewards, respectively; odds ratios 12·1 [3·7–39·9] and 14·0 [4·2–46·2]). Larger financial incentives therefore might produce even greater adherence of patients and public health protection for the UK’s population. But is it ethical to use this reward mechanism, is it practical, and is it smart policy?

I see no ethical problems with the study procedures. For participants, the likelihood and severity of risks from vaccination were far less serious than were the scope and likelihood of vaccine benefits. No patient was denied care, none was pushed into receiving it, and full information was provided to allow patient decision making. In view of the definitive nature of these findings, the question as to whether offering the level of incentives necessary to protect increasing numbers of UK citizens is ethical could be asked—especially in areas of special public health concern and expense such as childhood vaccinations and infectious diseases.

Practical problems will arise if and when contingent incentive payments are scaled up, and the fact that contingent rewards were provided in Weaver and colleagues’ study by the regular health care staff without any additional specialist assistance is important. This feature suggests that such a procedure can be implemented in usual settings, but some questions remain. Where will health care teams get the funds to pay patients? Will special funding systems be set up for incentives and how will these funds...
be monitored? If redeemable vouchers, cheques, or elimination of insurance copayments were to be offered instead of cash, problems might arise because these mechanisms are not always as effective as cash in producing the desired behaviour (and are often as difficult to manage). If contingent incentives are to become more broadly used, new administrative and fiscal procedures will be needed to allow them to be used in a clinically practical manner.

Is contingency management a smart approach? And are the extra costs of incentives worth it? To examine these questions, let us assume relatively fixed costs of vaccine provision (eg, medicine, salaries, and facilities), a reasonably high likelihood that unvaccinated, at-risk patients would contract the illness and assume its associated costs, and that a substantial reduction would occur in those public health threats and costs from full vaccination. In cases where the fixed costs are high, the likelihood of illness is high, and the associated costs are high, incentives will probably be worthwhile. In this situation, contingent incentives mean that no payments are made without the desired behaviour: facilities only pay if the incentives work.

In cases in which a serious public health threat exists as well as an effective but perhaps unattractive prevention or risk-reduction intervention, contingent incentives for at-risk patients can be ethical, cost effective, and, in the right circumstances, practical. Nonetheless, many people will be left with the uneasy feeling that these kinds of incentives do not seem right. Why should an at-risk patient who stands to benefit directly from doing the right thing also have to be paid to do it? These feelings can be especially troubling if one assumes that preventive health care interventions are responsible actions with intrinsic moral value to self and others. As my mother always said about doing the right thing, virtue is its own reward.

But health-care interventions can also be thought of as commodities governed by rules of the marketplace—even in the UK. In this context, the treatment-as-usual group in Weaver and colleagues’ study might be seen as a market test of a product (preventive vaccination) in which the expected individual and public health value apparently was not worth the cost (ie, it meant injection pain, no immediate symptom relief, and several clinic trips) to the target customers (at-risk individuals). These value determinations are difficult for many people who might underestimate the risk of modest dangers with relatively high and immediate likelihood (eg, influenza); and overestimate risk of more serious dangers (eg, HIV or tuberculosis) with delayed and relatively low likelihood. In turn, the experimental incentive groups in Weaver and colleagues’ study can be thought of as seller-initiated efforts to offset decision balance and customer reluctance to purchase a service. In this context, the contingent financial incentives do not seem very different from similar seller-initiated immediate, positive rewards to attract targeted customers (eg, 20% off coupons or buy-one-get-one-free sales).

It might be lamentable to think of health care in this crass, commercial manner, but it could also be relevant to the ultimate goal of getting broad acceptance and use of cost-effective prevention initiatives. Health care policy makers might be wise to consider traditional market forces when designing and delivering prevention strategies. The findings from Weaver and colleagues’ study suggest that contingent financial incentives might be as or more important in the disease prevention marketplace as they are in commercial markets.

A Thomas McLellan
Treatment Research Institute, Philadelphia, PA 19106, USA
TMcLellan@tresearch.org
I declare that I have no competing interests.

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