CONFLICTS OF INTEREST, BOTH FINANCIAL AND NON-FINANCIAL, ARE UBQUITOUS IN MEDICINE, AND THE MOST COMMONLY PRESCRIBED REMEDY IS DISCLOSURE. THE MEDICARE PAYMENT ADVISORY COMMISSION AND THE ACCOUNTABLE CARE ACT IMPOSE A RANGE OF DISCLOSURE REQUIREMENTS FOR PHYSICIANS, AND ALMOST ALL MEDICAL JOURNALS NOW REQUIRE AUTHORS TO DISCLOSE CONFLICTS OF INTEREST (ALTHOUGH THESE REQUIREMENTS MAY BE IMPERFEECTLY HEEDED). GIVEN THAT SOME RELATIONSHIPS BETWEEN PHYSICIANS AND INDUSTRY ARE FRUITFUL AND SOME CONFLICTS ARE UNAVOIDABLE, CAN DISCLOSURE CORRECT THE PROBLEMS THAT ARSE WHEN ECONOMIC INTERESTS PREVENT PHYSICIANS FROM PUTTING PATIENTS' INTERESTS FIRST?

Disclosure has appeal across the political spectrum because it acknowledges the problem of conflicts but involves minimal regulation and is less expensive to implement than more comprehensive remedies. More importantly, even if disclosure is rarely seen as providing a complete solution to the problem, it is broadly perceived to have beneficil effects. There are, however, reasons that disclosure can have adverse effects, exacerbating bias and hurting those it is ostensibly intended to help.

**Increased Bias and Insufficient Discounting With Disclosure**

Disclosure can lead physicians to offer biased advice. Two mechanisms involved are strategic exaggeration (the tendency to provide more biased advice to counteract anticipated discounting) and moral licensing (the often unconscious feeling that biased advice is justifiable because the advisee has been warned). In 2 sets of studies that mimic aspects of the patient-physician relationship, participants were paired and divided into 2 roles: advisor and estimator. Estimators attempted to assess some quantity (in one study, the value of coins in jars; in the other, recent house sale prices) but received only imperfect information (eg, they were able to view the coin jars briefly and from a distance). Advisors were made into relative experts (eg, by being allowed unlimited time to view the coin jars up close), and they provided advice to less informed estimators in the form of suggested estimates. Estimators received the advice, made estimates, and were paid based on their accuracy. In some experimental conditions, advisors were not conflicted but were paid based on the estimator’s accuracy. In other conditions, advisors were conflicted; they were paid to the extent that their estimators overestimated the values in question. In some of these conditions, the advisor’s conflict was disclosed to the estimator, and in others it was not. Not surprisingly, conflicted advisors gave more biased (higher) advice than those with no conflicts. However, consistent with strategic exaggeration and moral licensing, a key finding was that the bias was substantially greater when the conflict of interest was disclosed.

The greater bias of advice with disclosure would not be a problem if estimators (or, in the case of medicine, patients) could use disclosure to discount the advice appropriately, but this did not happen. With disclosure, estimators did discount the advice more, but not sufficiently to counteract the increased bias in the advice they received. In both studies, estimators made less money with disclosure than without it and advisors made more, exactly the opposite of the intended effect of disclosure. This failure to properly discount biased advice is almost certainly more of a problem in medicine than it was in those stylized experiments. Although patients are ready to believe that physicians in general may be biased by conflicts of interest, most are resistant to the idea that their own physicians would be so biased. This may be partly due to the common misconception that bias, to the extent it occurs, results from deliberate deception. In fact, even well-meaning professionals can find it difficult to resist the unconscious influence of the incentives that they may face for providing biased advice. Indeed, patients may even take the disclosed fact that their physicians have been paid by pharmaceutical companies as an indication that those physicians must be experts on the drugs produced by those companies.

**Increased Pressure to Comply: The Burden of Disclosure**

Other studies specifically focusing on the patient-physician relationship examined another potentially perverse effect of disclosure. Participating physicians were asked to estimate the sales price of 2 fictitious houses. In one group, physicians were paid based on their accuracy. In another group, they were paid a fixed salary. In both groups, the medical assistant was asked to determine whether the physician was conflicted (eg, the physician was the owner of 1 of the houses). In the group that was paid based on their accuracy, the medical assistant reported that the physician was conflicted more often when disclosure was required. This suggests a strain on the physician, who must decide whether or not to disclose conflicts in the case of a real patient. Disclosing a conflict or opportunity for financial gain may cause the physician to believe that they are no longer able to serve the patient’s interest.

**Disclosure has appeal across the political spectrum because it acknowledges the problem of conflicts but involves minimal regulation and is less expensive to implement than more comprehensive remedies.**
Disclosure: even when disclosure decreases trust in advice, it can increase the pressure on patients to comply with the advice. One mechanism of this effect is insinuation anxiety.\textsuperscript{6,7} Consider a patient who turns down her physician’s suggestion that she enroll in a clinical trial. Why did she reject the trial? One likely explanation is that she is satisfied with her current treatment. However, if disclosure has occurred (eg, if the physician has told the patient that the physician would receive a referral fee if the patient took part in the trial), the patient might worry that there would be a new interpretation of her rejection of the trial, namely, that the patient suspects that the physician is corrupt. Therefore, disclosure is likely to decrease trust in the clinician’s advice (regardless of whether the advice is biased) yet increase pressure to take the advice due to fear of signaling distrust of the physician. These effects occurred both in stylized laboratory experiments involving advisors and recipients and in scenario studies in which participants took the perspective of patients receiving advice (either with or without disclosure) from a conflicted physician.

Enhancing the Effectiveness of Disclosure

Despite its potential pitfalls, disclosure is almost certainly a good thing. It should be a patient’s right to know whether his or her physician is receiving financial benefits from prescribing a particular drug or will personally benefit if the patient accepts recommended tests or procedures. The question for policy should not be whether to disclose but how to ensure that disclosure has its intended effects.

Research has revealed ways of making disclosure more effective.\textsuperscript{8} For example, unconflicted second opinions are helpful in enabling patients to assess the effect of disclosed conflicts on the advice they receive. Insurers could routinely cover the cost of (and provide incentives to patients for) obtaining disinterested second opinions. Disclosure works better when it is provided by third parties and when the patient is given time to reflect dispassionately on the advice (and the disclosure) and make his or her decisions while not in the presence of the physician.

To the extent that disclosure works, it typically does so by influencing the behavior of those whom the disclosure is about more than those to whom the disclosure has been made.\textsuperscript{9} For example, the publication of automobile roll-over statistics led to rapid changes in automobile design, and public grading of restaurant hygiene in Los Angeles led to a decrease in food-borne illness. Applied to the patient-physician relationship, the prospect of disclosing a conflict could discourage physicians from entering into relationships that are difficult to justify.

Medical disclosure could be made more effective, less burdensome, and very likely more complete by creating a unified web-based universal online disclosure form, by storing and sharing detailed information on financial conflicts of interest in cancer research trials.\textsuperscript{42} If disclosures are increased, and if there is ongoing economic pressure to increase revenue, the incentives for providing high-cost services of dubious value, may be more consequential. It is difficult to imagine how disclosure could even be applied to, let alone undo, those problems.

When Disclosure Misses

Even if disclosure is crafted in a fashion that increases effectiveness and minimizes potentially adverse consequences, it is no panacea. Disclosure is simply not applicable to many serious conflicts of interest affecting medicine in the United States. Although payments from pharmaceutical and device companies have received most of the attention in the literature on disclosure, other conflicts, such as financial arrangements that give physicians (and their institutions) incentives for providing high-cost services of dubious value, may be more consequential. It is difficult to imagine how disclosure could even be applied to, let alone undo, those problems.

However, perhaps the most significant likely pitfall of disclosure is not its effects on the quality of advice received by individual patients or its inapplicability to many serious conflicts of interest, but the likelihood of a kind of moral licensing on the part of the profession as a whole—the rationalization that, with disclosure, the profession has dispensed with its obligation to deal with conflicts of interest. Conflicts of interest, including fee-for-service arrangements, are at the heart of the astronomical increases in health care costs in the United States, and transparency is no substitute for more substantive reform.

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REFERENCES