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Target Article

The Pitfalls of Deducing Ethics From Behavioral Economics: Why the Association of American Medical Colleges Is Wrong About Pharmaceutical Detailing

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The Association of American Medical Colleges (AAMC) is urging academic medical centers to ban pharmaceutical detailing. This policy followed from a consideration of behavioral and neuroeconomics research. I argue that this research did not warrant the conclusions drawn from it. Pharmaceutical detailing carries risks of cognitive error for physicians, as do other forms of information exchange. Physicians may overcome such risks; those determined to do so may ethically engage in pharmaceutical detailing. Whether or not they should do so is a prudential judgment about which reasonable people may disagree. The AAMC's ethical condemnation of detailing is unwarranted and will subvert efforts to maintain a realm of physician discretion in clinical work that is increasingly threatened in our present practice environment.

Keywords: academic medicine, behavioral economics, medical ethics, medical professionalism, pharmaceutical detailing, pharmaceutical industry

Medicine's relations with industry have long been a topic of controversy within academic medicine, and direct pharmaceutical advertising to physicians, also known as pharmaceutical detailing, has been a special target of criticism. Criticism of detailing intensified with the turn of the new century, and recently critics have begun to make progress at the organizational level. In 2006 a call for an academic ban on detailing appeared in the *Journal of the American Medical Association* (Brennan et al. 2006), and the Association of American Medical Colleges (AAMC) charged a task force that took up this and other aspects of academic medicine's relations with industry. In the past 2 years a number of academic medical centers have banned detailing (Rothman and Chimonas 2008). The AAMC task force issued a report in 2008 that condemned detailing practices as unethical (Association of American Medical Colleges, 2008a). Shortly thereafter, the report was unanimously approved by the Association's Executive Council (Association of American Medical Colleges 2008b), and the AAMC is now encouraging medical schools that have not yet implemented the report's recommendations to do so.

Until recent years the academic case against detailing has depended upon studies examining bias in industry advertising and its effects on physicians. As summarized by Wazana in a widely quoted meta-analysis (Wazana 2000), this literature suggests that detailing induces physicians to prescribe new drugs too rapidly, to request the addition to formularies of drugs that offer no advantage over existing drugs, and to prescribe fewer generic drugs. Such conclusions have a good deal of face validity for many physicians, who, whether or not they participate in detailing, agree that information from drug representatives is inevitably biased (Manchanda and Honka 2005; Prosser and Walley 2003). Skepticism about detailing is also fueled by well-publicized detailing misconduct by pharmaceutical companies, such as Parke-Davis's improper promotion of gabapentin for off-label uses in the late 1990s (Steinman et al. 2007), as well as by what appears to have been over-zealous industry promotion of drugs that did not live up their promise, such as the Cox-2 inhibitors.

The AAMC did not particularly rely upon the Wazana studies in formulating its recommendations on medicine–industry relations. It turned instead to a new line of criticism of detailing that has emerged in the past 10 years or so: social science in the form of behavioral and neuroeconomics. Rather than focusing on conscious corruption occurring through conflict of interest, critics informed by behavioral economics suggest that unconscious influence exerted by advertising and promotional "gifts" on physician decision making inevitably bias physician decisions—and that the necessary remedy is avoidance of the "gifts" and the advertising (Dana and Loewenstein 2003; Katz et al. 2003).

I argue that the behavioral economists have overgeneralized from their data in drawing conclusions about

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pharmaceutical detailing; that the AAMC has followed them in this error; and that both the AAMC's recommendations and its ethical rationale for them are mistaken. I begin by discussing the empirical literature on pharmaceutical detailing apart from behavioral economics. This literature does not warrant a final conclusion as to aggregate benefit or harm from pharmaceutical detailing. I go on to discuss the AAMC report, the behavioral economics data the report relied upon, and the limitations of that data for drawing conclusions about pharmaceutical detailing. I suggest that the current state of our knowledge about detailing warrants a prudential response rather than ethical condemnation and that reasonable people may disagree about what that prudential response should be. Finally, I argue that the AAMC's position on detailing is likely to be subversive of efforts to maintain a realm of physician discretion in clinical work that is increasingly threatened in our present practice environment.

THE EMPIRICAL LITERATURE ON PHARMACEUTICAL DETAILING APART FROM BEHAVIORAL ECONOMICS

While there are many sources for physician skepticism about detailing, the Wazana studies are inconclusive as to its aggregate effects for good or ill. The data they report is generally in the form of survey results, and their outcome measures are remembered rather than actual prescribing behavior. They have been trenchantly criticized in the economics literature (Rubin 2004; summarized in Huddle 2008; see also Epstein 2007); their conclusions are persuasive primarily when allied to a preexisting discontent with industry bias in detailing. But while bias may indeed lead to misprescribing, it may also be overcome, and insofar as physicians extract accurate and useful information from detailing, such influence as it exerts will be beneficial, a contingency largely unexamined in the studies cited by Wazana. That physicians do make good use of detailing information, at least some of the time, is suggested by work published in the economics and finance literature.

Until the past 10 years most research on the empirical effects of advertising considered its quantitative effects on markets rather than how advertising achieved such effects (Ackerberg 2001). There has recently emerged a sophisticated literature examining the mechanism of advertising's effects in pharmaceutical and other markets through econometric modeling. While the studies involved are not randomized trials, unlike the Wazana studies they do make use of actual data regarding detailing visits, pharmaceutical sales, and physician prescribing behavior. Economists traditionally distinguish between informative and persuasive effects of advertising—archtypal examples of each might be the informative classifieds and the persuasive ads for Coca-Cola, to use examples of Ackerberg's. In the case of new drugs, ads containing little explicit information can still serve an informative function by conveying news of a product's existence and by signaling quality. Of course, the distinction between information and persuasion is not hard and fast; in the case of pharmaceuticals, what physicians find persuasive is often information about drug efficacy or side effects. It may also be worth noting that the distinction between informative and persuasive effects of advertising may be drawn irrespective of the presence or absence of bias therein. Economists tend to be less interested than physicians in measuring ads against a standard of academic completeness and impartiality—the more interesting question for them is whether the effects of advertising are socially useful, however such effects are achieved. In recent studies of pharmaceutical sales, informative effects of detailing are defined as those enabling consumers (in this case physicians) to update their prior beliefs about the true quality of a new product through Bayesian learning (Narayanan et al. 2005). All other effects of detailing, such as reminder effects or goodwill between detailer and physician, are deemed to be persuasive.

Recent work in economics suggests that detailing has a positive effect on drug sales and that it plays a predominantly informative role, especially early in a drug's life cycle. Azoulay found that science independent of detailing played the most important informative role in expanding the market for H2 blockers in the mid-1990s but that detailing was also important and that it acted informatively rather than persuasively (Azoulay 2002). Narayanan and colleagues confirmed that detailing acted informatively in the early stages of drug diffusion in the market for nonsedating antihistamines. After 6–14 months, persuasive effects predominated (Narayanan et al. 2005). Ching and Ishihara found detailing to be almost exclusively informative in the case of ACE inhibitor–diuretic combinations in the Canadian market in the mid-1990s (Ching and Ishihara 2007). That detailing exerts much of its effect through the promulgation of science is suggested by work of Venkataraman and Stremersch, who confirmed that detailing has a greater effect for drugs that are more effective and have fewer side effects in several different therapeutic classes (Venkataraman and Stremersch 2007). That the effect of science independent of detailing may be less than optimal is suggested by work of Majumdar et al., who compared the increase in use of ramipril after the publication of the HOPE study to increased use of spironolactone after the publication of RALES. Ramipril was heavily promoted in the aftermath of the HOPE Study, while spironolactone, a "pharmaceutical orphan," was not after RALES. The investigators found that the use of ramipril increased 5–12% per month (in Canada and the United States, respectively) after the publication of HOPE, whereas spironolactone use increased 2% per month after RALES in both countries (Majumdar et al. 2003). Of course, we cannot specify optimal levels of ACE inhibitor use or spironolactone use with which actual use of these medications may be compared; it is nevertheless plausible to suppose that in the case of both spironolactone and ACE inhibitors, there was scope for substantial clinical benefit through increased use indicated by the respective studies, and that promotion had a beneficial effect in achieving such increase in the case of ACE inhibitors after HOPE.

Most academic physicians are likely unaware of the economics and finance literature on detailing. Certainly the AAMC did not rely upon it in formulating its recommendations and it did not particularly invoke the Wazana studies. Instead, it turned to recent work in behavioral and neuroeconomics.

BEHAVIORAL ECONOMICS, PHARMACEUTICAL DETAILING AND THE AAMC REPORT

The AAMC had prominent behavioral economists formally present their findings to the task force in 2007 (Association of American Medical Colleges 2007) as a prelude to the final committee report of 2008. This expert testimony was critical in shaping the final report, which declared that physicians engaging in the usual practices of pharmaceutical detailing, whether as providers or subjects, were breaching the ethical standards of medical professionalism. These recommendations enjoined academic centers not only to forbid detailing within their confines but, insofar as possible, to prevent academic physicians from engaging in detailing on their own time. This willingness to intrude into the lives of employees outside of working hours followed from the report's ethical conclusions; medical professionalism is, after all "ultimately a personal responsibility . . . (and) the behaviors of individual faculty members in their personal time are important components of professional conduct" (Association of American Medical Colleges 2008a, XX).

The experts who presented research at the AAMC Symposium were Read Montague, Dan Ariely, George Loewenstein, and Max Bazerman, prominent practitioners of behavioral and neuroeconomics. These experts discussed evidence drawn primarily from psychological laboratory experiments offering subjects varying choices between moral/other-regarding and immoral/self-regarding behavior in game settings or test exercises.

Montague discussed work showing the induction of reciprocity by favors given, including a functional magnetic resonance imaging (fMRI) study of subjects in a trust game; Ariely discussed experiments elucidating conditions that elicit or discourage unethical behavior in multiple-choice test-taking. He suggested that while people allow themselves to cheat when the opportunity is present, the extent of such cheating varied with "the leeway people have to interpret their actions," with more leeway leading to more cheating. Ariely's work highlighted our tendency to deceive ourselves by generating self-justifying rationales for dishonest behavior. Loewenstein discussed variations of a dictator game, showing how easily self-interested bias can affect decision making in that setting. He then discussed an experiment examining the efficacy of disclosure on subjects in a conflict of interest situation. The experiment showed that disclosure may fail to de-bias such subjects. The thrust of all of this work was to suggest the inevitability of cognitive and motivational error when people were subject to seemingly minor or subtle incentives to err.

The behavioral economists went on to draw the lessons from this work for medicine–industry relationships. Loewenstein concluded that conflicts of interest in medicine induced by industry relationships were inevitably biasing and that the only remedy was to eliminate such conflicts wherever possible. Max Bazerman amplified this conclusion, drawing upon the behavioral economics notions of "bounded awareness" and "bounded ethicality," respectively referring to human tendencies to see and believe what we wish and to succumb to unconscious bias in decision making. Using the example of the auditing profession, he drew the most pointed conclusion for medicine–industry relationships, contrasting two possible policy approaches to these problems: Physicians might address biases induced by industry relationships by encouraging countervailing incentives and influences, or they might simply avoid industry relationships. Bazerman had no hesitation in recommending the latter approach (Association of American Medical Colleges 2007).

The AAMC took these conclusions to heart in its committee report on industry funding of medical education (Association of American Medical Colleges 2008a), published the following year. The report suggests that academic medical centers forbid certain physician–industry relationships, principally those of pharmaceutical detailing. Physicians ought not to accept detailing "gifts" or attend non-ACCME-accredited industry events. Interestingly, the recommendations of the report do not go as far as the conclusions of the symposium (and the programmatic statements of the report) might suggest; the report finds it acceptable for academic centers to accept industry funds for ACCME-compliant educational events and industry food for such events. Why industry gifts in these contexts would be exempt from causing unacceptable bias in light of the AAMC's interpretation of the symposium data is left unexplained.

While the policies recommended in the report are thus not wholly consistent with its message, the message is clear: Pharmaceutical detailing is inevitably corrupting to its physician participants through the unconscious bias it induces. Given the inevitability of bias from detailing, physicians who engage in it, whether as providers or as subjects, breach professional ethical standards. Academic centers should forbid it on site and discourage it as much as possible elsewhere.

DOES LABORATORY WORK IN BEHAVIORAL ECONOMICS CAPTURE THE IMPORTANT ASPECTS OF PHARMACEUTICAL DETAILING?

Abstract ethical principles are by themselves inadequate to fully specify the ethics of human practices (although they may certainly point the way). It is the nature of practices themselves and the constraints that given practices impose on practitioners that determine the specific ethics of decision making in those practices. The AAMC experts and the AAMC itself presume that the constraints on physician decision making among those who subject themselves to pharmaceutical detailing have been adequately elucidated by the psychological experiments cited at the AAMC Symposium. Is this likely to be correct?

Generalizing from the laboratory to the field in psychology is not quite as straightforward as it can be in physiology. The phenomena of interest in pharmaceutical detailing are, as with other social activities, participant-relative rather than simply given. That is, they are socially constructed and hence dependent upon the governing norms, skills, and perceptions of participants, in this case pharmaceutical representatives and physicians (Searle 1995). That being the case, the generalizability of laboratory experiments to the field setting of detailing will depend upon the extent to which we can be assured that the laboratory setting has recreated the essential features of the detailing interaction as perceived by physicians and pharmaceutical representatives. Laboratory experiments do not typically offer such "external validity"—that is, generalizability to real-world contexts. Their forte is "internal validity"—a higher likelihood of legitimate inferences about cause–effect relationships and hence of adequate models of aggregate behavior (Loewenstein 1999).

The AAMC experts were, of course, aware that their experiments did not provide formal external validity in the case of pharmaceutical detailing. But they were clearly confident that these experiments had captured the important aspects of detailing in spite of a lack of corresponding field work to ensure such capture. Such confidence presumably followed from a belief that the cause–effect relationships demonstrated in the laboratory would account for the social phenomena of detailing without a need for further modification. Of course, to the extent that social phenomena can be adequately conceived in terms of the sort of cause-effect relationships that emerge in laboratory work, generalizations to the field from the laboratory data of behavioral and neuroeconomics are likely to succeed. But there are many grounds for supposing that social phenomena are not amenable to analysis in terms of such cause–effect models, or are so only to a very limited extent: that what is called for to understand pharmaceutical detailing or any other real-life activity are the methods not of laboratory psychology alone but in addition those of sociology, anthropology, and economics. As Clifford Geertz observes:

> Human beings, gifted with language and living in history, are, for better or worse, possessed of intentions, visions, memories, hopes, and moods, as well as of passions and judgments, and these have more than a little to do with what they do and why they do it. An attempt to understand their social and cultural life in terms of forces, mechanisms, and drives alone, objectivized variables set in systems of closed causality, seems unlikely of success. (1995, XX)

This is not to say that the cognitive errors and biases uncovered in the laboratory experiments of behavioral decision research are not relevant to real life; they clearly are. The laboratory may usefully elucidate such errors and, by varying experimental treatments, the conditions under which they are likely to emerge (Bardsley 2005). But the bearing of such research on particular human activities must be demonstrated rather than presumed. That laboratory findings do not generalize to the field has been shown for other kinds of activities. The laboratory may both underestimate or overestimate pro-social behavior for different field contexts (List 2006; Levitt 2007). To assess whether physicians routinely make the kinds of errors suggested by laboratory study would require field research. As such fieldwork is lacking, the AAMC was premature to draw conclusions about physician bias and irrationality in response to detailing without it. It is the more general lack of such work that has so far left prominent economists unmoved by the critique leveled against neoclassical economics by their behavioral economics colleagues (Clement 2002; Levitt 2008). Even more troubling than this faulty use of science, however, are the ethical conclusions that the AAMC has drawn from it.

IMPLICATIONS OF COGNITIVE ERROR IN DETAILING FOR ETHICS AND POLICY

While the policy of academic medicine toward detailing should be determined by what we know of its effects, such policy ought not to be couched in terms of unqualified ethical declarations, whether of approval or prohibition. Because we experience the demands of morality individually, unqualified ethical imperatives are warranted when the moral valence of an activity enjoined or prohibited is clear for any person at whom the imperative is directed. The usual prohibitions associated with medical ethics have this character; betraying patient confidentiality, taking advantage of patient vulnerability, and killing patients (the latter until lately, at least) are always wrong for all physicians. The immorality of the prohibited act affixes unconditionally to the concept of the prohibited act. It is that kind of categorical wrongness that justifies our view of such transgressions as breaches of medical ethics and professionalism. We could have that kind of moral clarity about pharmaceutical detailing only if physician engagement with it was known to be inevitably and always harmful.

Certainly the empirical study of detailing apart from behavioral economics offers no reason to draw that conclusion. Neither the work analyzed by Wazana nor the economics literature is decisive as to the aggregate effects of detailing on physician prescribing, health care costs, or patient health outcomes. The Wazana studies generally were not designed to assess these outcomes directly and paid insufficient attention to possible useful learning from detailing. The economics literature makes more use of actual data regarding prescribing, pharmaceutical sales, and detailing visits, but its models are necessarily suggestive rather than conclusive as to detailing's effects. We might conclude from both the Wazana studies and the economics literature that detailing is morally significant according to its uses and consequences, which may be either good or bad according to its content and the use made of that content by physicians who engage with it (I do not here address the position that any physician engagement with commercial advertising having to do with medicine or its practice is of itself a breach of professional ethics). Policy responses to detailing

insofar as they are based upon either the Wazana studies or the economics work should therefore take the form of prudential determinations rather than ethical pronouncements, whatever is decided as to whether physicians should be permitted to participate.

If we turn our attention from the Wazana studies and the economics literature to behavioral economics, we will not find the state of our knowledge about pharmaceutical detailing to be transformed. When fieldwork has been done to explore the actual importance of the cognitive and motivational biases detected in the laboratory that might affect detailing interactions, we are likely to find that such biases affect some but not all physician decision making that is responsive to detailing. Such results will continue to warrant a prudential policy response but not outright ethical condemnation of detailing such as the AAMC has delivered.

ALTERNATIVE POLICY RESPONSES TO DETAILING

Given some prevalence of physician irrationality in response to detailing, as is likely to be the case, the policy response might to restrict detailing and to discourage or prohibit physician participation, or it might be to seek improvement in physician processing of detailing. Which of these options we prefer will likely depend upon our beliefs, both empirical and normative, about human nature and society—in particular, our beliefs as to the advantages and disadvantages of commercialism in given contexts and as to what potential individuals have for overcoming irrationality in those contexts.

It seems likely that differing beliefs on such basic issues inform the two sides of the debate presently taking place among academic physicians about medicine's relations with industry. On one side are industry skeptics, who seek to better police our interactions with the drug companies, which, in their view, have been far too free and easy. Academics in bed with these companies are responsible, it is claimed, for biased research, distorted education, and biased practice guidelines that have altered medical practice to further industry interests at the expense of patients and their insurers. Academics thus need to more carefully regulate their relations with industry; conflict of interest must be eliminated rather than merely disclosed; physicians with industry ties ought not to be authoring guidelines; industry funding for education must be eliminated; and pharmaceutical marketing should be severely curtailed (Brody 2007; Relman 2007; Brennan et al. 2006; Katz et al. 2003).

Those resisting such measures point to the benefits of the industry–academic relationship and suggest that these will be sacrificed by limiting that relationship as suggested by industry skeptics. Industry ties, far from being grounds for suspicion, ought to be encouraged among academics. Bias in research comes from multiple sources and financial bias from industry support is surmountable. Guidelines ought to be written by those who are the most knowledgeable about the science informing them—which will include, among others, physicians with industry ties. Restrictions on industry advertising and support for education will lead not to more impartial but to less well informed physicians. Stringent conflict of interest rules are likely to stifle the production of new drugs as those scientists best able to advise pharmaceutical companies seeking to develop them are inhibited from doing so (Stossel 2005; Epstein 2007; Huddle 2008).

This debate is clearly political and ideological; it is reflected in similar debates occurring in other disciplines, most notably economics and policy. Those who have been most receptive to the research program of behavioral economics have been economists and others on the left who advocate more regulation of markets and other choice settings in which people might do better if protected from their own irrationality (Tetlock and Mellers 2002). The approach to conflict of interest that accompanies this regulatory prescription is generally to seek its elimination by the structural reform of choice settings. The opposing set of preferences, held by economists and others on the right, follows from a greater confidence that people can overcome irrationality and a greater reluctance to transfer individual decision making to groups of experts, who may be no less prone to irrationality than those whom they seek to protect. To this way of thinking, behavioral economics looks like one more way to justify government micromanagement of individual decision making. Those on this side of the policy divide see conflict of interest as an important problem but are more inclined to manage such conflicts than to seek their removal—believing that the cure may in this case be worse than the disease, as removable conflicts of interest are often accompanied by the compensating advantage of having problems addressed by those most qualified to solve them. This debate is played out on a range of issues, from consumer protection to campaign finance reform.

The error of the AAMC is in mistaking an inevitable political debate for a contest of good and evil, and in thus supposing that professional ethics mandates endorsement of one side of that contest. It comes to this conclusion only by presuming what very much remains to be proven, that the bounded rationality seen in the laboratories of behavioral economists is both pervasive in detailing interactions and insurmountable. The latter point is important. Whatever the type, prevalence, and severity of cognitive and motivational error that may be demonstrated by fieldwork on pharmaceutical detailing, physician susceptibility to such error is both unlikely to be uniform and likely to be improvable through education. Given the other advantages of detailing, such as usable knowledge of new drugs getting to physicians more rapidly than it otherwise would, improving physician processing of detailing may be a better policy response than prohibition.

Promoting the effective processing of detailing would also fit well with an important contemporary health policy priority, that of protecting individual physician discretion in clinical work.

DISCRETION AND CONTROL IN STRUCTURING CLINICAL WORK

Physician engagement with pharmaceutical detailing is consonant with the balance of structural control and individual discretion which we ought to be seeking in a better health system. Clinical knowledge is a capacity for intelligent assessment of the individual case that is irreducible to routine or algorithm; this is a necessary premise of professional work but it is increasingly challenged in the current practice environment (Huddle 2007). Internal medicine physicians in particular charge themselves with a responsibility to go beyond a cookbook approach to clinical action and thus to intelligently engage with the idiosyncrasies of the individual case. Internists are fighting contemporary trends in third-party scrutiny of practice, such as judgments of quality of care relying exclusively upon narrow sets of quality indicators that are subversive of such intelligent engagement. Many third-party payers are seemingly indifferent to the quality of clinical work as long as indicators have been met—a deplorable state of affairs.

If we are to preserve an important place for intelligence and thus for clinical discretion in our work, as we must, we ought not to send the message that physicians are unable, or cannot be trusted, to sift potential new clinical knowledge so as to use it properly and ethically. The proper response to such cognitive error as there is in physician prescribing is not to forbid access to potentially useful forms of information about drugs; it is to improve our collective use of such information. There is plenty of room for improvement during medical training; we do not do a good job of equipping our trainees to avoid the most likely kinds of error attributable to detailing: prescribing expensive medicines without a clear indication and prescribing such medicines when cheaper medicines would do. Practice styles taught in internal medicine training likely vary but, particularly at the subspecialty level, there are probably more physicians who err on the side of treating when in doubt than of therapeutic minimalism. And internal medicine training probably does a very poor job at teaching cost-effectiveness, particularly in the use of medications. Any such instruction in the outpatient clinic is likely overshadowed by a relatively indiscriminate use of diagnostic technology on the inpatient side that leaves trainees unmoved by the difference in price between generic medications and their branded counterparts, particularly if the name brands are covered by insurance and the cost is not borne by the patient. Educators need to take to heart the problem of health care costs by instilling a determination not only to intelligently assess and treat patients but to do so in the most cost-effective possible way. They should also expose trainees to detailing under faculty supervisors—ideally, supervisors who do not hesitate to challenge the drug representative's sales pitch. Assessing information where bias is obvious may be a salutary aspect of learning to sift all kinds of evidence carefully, whereas isolating our trainees from the voice of industry will leave them less prepared to encounter that voice, as they almost certainly will, when they leave academic centers.

There is, of course, a role for systemic controls as a means to better prescribing. Such controls are already being instituted with much success at the level of payers, who are using tiered formularies encouraging physicians to prescribe cheaper medicines or justify their use of more expensive ones. Such manipulation of the physician choice setting is analogous to the most successful policy suggestion of behavioral economists: for providing default investment choices in 401(k) plans that encourage socially useful outcomes (Thaler and Sunstein 2008). Insurers need to extend this kind of incentive to achieve our goals efficiently to the use of diagnostic technology and medical procedures; perhaps only when they do will educators be able to get the message of cost-effectiveness across to trainees. The virtue of this sort of systemic control is its encouragement of good practice while preserving the physician's freedom of thought and action. Instead of being forced into an unthinking adherence to specific treatment guidelines, the physician may still act as she or he deems appropriate but must justify exceptions to what would normally appear to be the indicated and efficient choice. Such systems of control can easily become too restrictive or set the wrong priorities, but if we are to value cost containment, as we must, we must accept such systems while seeking to avoid those outcomes.

Incentive structures of this sort influence physician choices without attempting to direct them ex ante by acting at the point of physician decision.[1] Attempts to micromanage physician choice of learning resources is a far more intrusive form of control and is likely to sap necessary skills of information assessment if physicians take to heart the message that certain kinds of plausible information must simply be rejected out of hand while others may be simply trusted. That is certainly the message likely to be conveyed by the AAMC's strictures on pharmaceutical detailing.

CONCLUSION

Contrary opinions about pharmaceutical detailing are certainly defensible. Policy preferences on detailing are, at present, necessarily underdetermined by data and will thus align according to broader configurations of ideological belief and opinion, as I have argued here—including preferences for or against market mechanisms in health care, general sentiments about the pharmaceutical industry, preferences for a more or less tightly controlled informational marketplace for physicians, and preferences for allowing more or less professional discretion in clinical work.

Whatever collective professional response to detailing we decide upon, the present state of the evidence does not warrant a rejection of it on ethical grounds. That conclusion follows from the contingency of cognitive error in response

1. For a discussion of the policy uses of ex ante and ex post paternalism see Klick and Mitchell 2006. While ex post paternalistic policies are not without cost, ex post constraints on physician decisions seem more likely to achieve policy goals such as cost containment without unduly discouraging thoughtful physician decision making than are ex ante attempts to direct physician thought process.

to detailing; if such error is not inevitable—as it clearly is not—it cannot be categorically required that we avoid settings in which error is merely possible—particularly if such settings offer us potentially usable knowledge. That is why the AAMC is mistaken to assert that participation in detailing violates canons of medical professionalism. The recent Institute of Medicine (IOM) report on conflict of interest was more circumspect in its condemnation of detailing; while its policy recommendations are broadly similar to those of the AAMC, the report takes a cautious view of the literature on detailing (Lo and Field 2009). Its draconian recommendations appear to owe more to a conviction that the medical profession has been publically discredited by recent scandals involving its relations with industry than to empirical work on the effects of detailing. Government and the public will demand onerous regulation of the profession, the chairman of the IOM committee contends, if we do not clean our own house (*Wall Street Journal* 2009; Institute of Medicine Press Conference 2009).

Of course, the extent to which physicians need to clean this part of their house is deeply contested. As Thomas Stossel has observed, the actual frequency of academic research misconduct has not increased in proportion to academic–industry relationships (Stossel 2005). It is unclear that measures aimed at the appearance of impropriety rather than at the real thing will improve research integrity, although such measures have great potential for unjustly stigmatizing researchers and stifling innovation. Restricting pharmaceutical detailing will, of course, reduce the transmission of misinformation, but it will also restrict beneficial effects of detailing.

Enacting prohibitions of such engagement on the grounds of appearances rather than the actual merits of the case, as the IOM suggests, is dangerous. Enacting prohibitions of engagement with detailing on ethical grounds, as the AAMC wishes academic institutions to do, is unwarranted by evidence and amounts to the imposition of an ideological preference in the garb of an ethical imperative. Industry skeptics among academic physicians are entitled to their disdain for commercialism, their dislike of the pharmaceutical industry, and their low opinion of pharmaceutical detailing. What they are not entitled to do is to suppose that these attitudes are demanded by medical professionalism and to impose them as moral orthodoxy on the profession at large. Other occupational groups have ventured into these waters before; the National Council for Accreditation of Teacher Education (NCATE) sought to encourage "commitment to social justice" as a disposition that teachers' colleges might assess in judging the suitability of candidate teachers. This was widely and plausibly seen as offering such colleges the opportunity to apply a political litmus test to students seeking to become teachers—as had already been happening in certain teachers' colleges (Wilson 2005). NCATE was forced to back down after widespread protest (Wilson 2007). We in medicine do not need to repeat its error. Medical educators must of course seek to ensure that trainees are committed to ethical standards; but we must take great care not to substitute political or ideological beliefs and attitudes for such standards. The AAMC should reconsider its condemnation of pharmaceutical detailing and should seek measures more in accord with what we know of its effects and with what we would wish the realm of professional discretion in clinical decision-making to be. ■

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