The Impact of Commercial Support on Continuing Medical Education: The Physician’s Perspective

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INTRODUCTION

The Current Environment

The increasing public discussion about the influence of commercial support on continuing medical education (CME) has arisen against a complex backdrop of federal and national oversight and membership organizations. Despite the heated debate and ever-growing number of regulations and restrictions, few (if any) of these organizations have sought input from the beneficiaries and users of CME programming. Clinicians, who are asked to see more patients with more complex illnesses in less time, face a significant burden to stay abreast of the latest information on acute and chronic diseases and the most effective interventions. Clinicians are required to demonstrate cost-effective care that improves outcomes for more patients, most often with an array of pharmaceutical agents and emerging medical devices that are controlled by formularies. Finally, most physicians must meet the mandate to earn a minimum number of educational credits, usually over a 2-year period, to maintain licensure/certification.

Physicians in practice can achieve these requirements by obtaining certified CME via a variety of vehicles (eg, live, print, and online programming) that are available from a number of sources. According to the Accreditation Council for Continuing Medical Education (ACCME), there are currently 2413 accredited providers of CME, including nonprofit physician-membership organizations such as the American Medical Association (AMA), hospital/health care delivery systems, medical schools, nonprofit publishing/education companies, and for-profit publishing/education companies, as well as regional providers accredited within the ACCME’s state-based system [1]. In 2006, the various accredited providers had a total income of $2.52 billion. The total amount that was derived from commercial support for both national and regional providers was approximately $1.2 billion.

Many contemporary articles in the professional press have decried this level of commercial support for CME, warning of potential conflicts of interest and bias [2]. Most recently, the AMA’s Council on Ethical and Judicial Affairs (CEJA) was reported to have recommended the elimination of commercial support of CME programming [3]. As evidence, these critiques have cited data on the growth in commercial support for CME providers by pharmaceutical companies, and for-profit publishing/education companies, from $889 million in 2003 to the $1.2 billion level of support in 2006 noted above [4].

In citing these figures, however, the critics have not referenced the context in which the growth has occurred, namely, the increasing pressure on physicians to see more patients each day, declining reimbursements for patients regardless of acuity, the tight control on the type and number of pharmaceutical agents physicians may use in the treatment of their patients because of formulary and health plan restrictions, and the vibrant research and clinical setting of new and emerging therapeutic interventions. An awareness of this complex and dynamic background facilitates an appreciation of the texture of the current regulatory environment in which physicians practice and seek effective, low-cost, yet high-quality CME.

Regulatory Oversight on CME and Commercial Support

In response to concerns that began in the late 1990s about the potential for bias in CME programs underwritten by commercial entities, a host of regulations and guidance documents were developed by a number of different federal and nonprofit organizations (Table 1) [1,5-7].

Together, these organizations have provided a structure within which CME may be developed and delivered. The following features are common to all of these efforts:

- Scientific rigor (ie, the presentation of evidence-based information),
- Fairness in the content (all reasonable therapeutic options must be presented),
- Independence of content development from commercial interests,
- Disclosure of potentially significant financial relationships between the funding organization and content developers and faculty, and
- Resolution of any potential conflict of interest that may result from such relationships prior to developing or delivering content.

At the end of 2007, the US Senate Finance Committee initiated hearings to investigate the scope of commercial support and its potential to inappropriately influence physician selection of therapies. In a recent related development, the US Senate Special Committee on Aging, reacting to reports that a pharmaceutical company was promoting its antiherpetic drug through CME programming, requested that ACCME provide the committee with information on its Standards for Commercial Support for CME as well as on its policies…

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regarding conflicts of interest. The ACCME executive
director, Murray Kopelow, MD, provided lengthy testi-
mony describing the ACCME standards in place to ensure
the independence of CME content from the influence of
commercial entities. The testimony described policies
for the identification of educational needs, establishing
educational objectives, the development of content, and
the selection of methods, faculty, and regulations regard-
ing evaluating and monitoring CME programming for
appropriateness and scientific rigor. This testimony also
recounted the organization’s commitment to and history
of continuous quality improvement.

Organizations such as the Josiah Macy, Jr. Foundation
have convened conferences to discuss the growth of com-
mercial support for and its impact on CME [2]. This
assemble of academic and association leaders made a
number of statements regarding the commercial support
of CME. Among these statements were their assertions
that commercial support for CME:
• Risks distorting the educational content and
invites bias,
• Raises concerns about the vows of health profes-
sionals to place patient interests uppermost,
• Endangers professional commitment to evidence-
based decision making,
• Validates and reinforces an entitlement mind-set
among health professionals that CME should be
paid for by others, and
• Impedes the adoption of more effective modes of
learning.

The Macy conference summary also concluded, “No
amount of strengthening of the ‘firewall’ between com-
mercial entities and the content and processes of CME
can eliminate the potential for bias.”

As a consequence of these events, a wave of criticism
of the current system (referred to as the CME enterprise)
by individuals and such groups as the AMA’s CEJA has
produced calls for the elimination of commercial support
for CME [3,4,8]. These calls, however, have been made
in the absence of input from practicing physicians.

It is noteworthy that at the June meeting of the AMA
House of Delegates, the recommendations by CEJA
to eliminate commercial support of CME were unani-
mously rejected.

Recent Developments

In response, the ACCME recently reexamined the
issue of commercial influence on educational content
and issued statements on conflicts of interest and poten-
tial bias [1]. It is interesting that the ACCME, the pre-
eminent organization of educational content and widely
accepted watchdog, has no data from “its own direct
measurements or from measurements made by Providers
on the prevalence or incidence of commercial bias in
today’s CME. No data demonstrating commercial con-
tent bias is found in the medical education or regulatory
literature” [1].

To further evaluate this issue, the ACCME commis-
ioned an independent review of the literature to deter-
mine if there is an evidence base from which to evalu-
ate the effect of commercial support on CME content
[9]. This review consisted of a search of databases (eg,
Medline, LexisNexis, and Business Source Complete)
that retrieved more than 2000 article titles relevant to
CME and its commercial support. Ultimately, the inde-
pendent reviewers identified only 10 evidence-based arti-
cles that addressed the relationship between commercial
support and CME. Two articles in this collection were
published in 1988 and 1992, but most of the articles
were written after 2000, with 3 articles having been pub-
lished in 2007. After careful review of these studies, the
reviewers stated that there was no empirical evidence to
support or refute the hypothesis that accredited CME
activities are biased.

The chief executives of 3 major credentialing organi-
zations for professional education (ACCME, American
Nurses Credentialing Center, Accreditation Council for
Pharmacy Education) recently responded [10] to the
Macy Foundation conference summary as follows: “Our
concern stems from our observation that neither the
Conference, its observations, its assumptions, its conclu-
sions, nor its recommendations seem to be based on the
facts . . . .” These leaders in the field of CME noted
that in the ensuing 10 years, important improvements have
been made to the system to diminish and minimize the
potential for commercial influence on CME content.
They further question the reliability and validity of the
evidence base upon which the Macy Foundation’s state-
ments were founded.

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<tr>
<th>Organization/Agency</th>
<th>Date</th>
<th>OIG*</th>
<th>FDA†</th>
<th>ACCME‡</th>
<th>PhRMA§</th>
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<tr>
<td>Compliance Program Guidance for Pharmaceutical Manufacturers</td>
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<td>Standards for Commercial Support</td>
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<td>Code on the Interactions with Healthcare Professions</td>
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†Food and Drug Administration (http://www.fda.gov/Cder/guidance/isse.htm).
‡Accreditation Council for Continuing Medical Education (http://www.accme.org).
§Pharmaceutical Manufacturers Association (http://www.phrma.org).
Thus, the debate has intensified over the past year, yet absent from this high-level policy debate has been any current or significant measure of the perceptions and opinions of practicing physicians, especially primary care providers, who would be directly affected by any new regulations regarding commercial support of CME.

As noted, much of the discussion until now has focused on the opinions of academics and others without taking into consideration the opinions and experiences of practicing physicians who attend and use certified CME programs to maintain both currency in their profession and certification. This article reports on data from primary care physicians about their opinions regarding the role of commercial support for CME and offers recommendations for moving forward to ensure continuous improvement in the quality of CME without sacrificing the significant benefits for practicing physicians and their patients. It is apparent from the data reported below that these highly educated professionals not only place significant value on the content of accredited CME programming but are willing to spend their time and energy to attend live programs and participate in print and online activities to enhance their knowledge and practice so that they can more effectively meet their patients’ needs.

**Physician Perceptions of Commercially Supported CME**

In May 2008, 21,074 physicians who had participated in CME activities (eg, live, print, and online programs) presented in 2006 and 2007 were invited to participate in this research effort. The survey was unbranded, was conducted by an independent firm, and was distributed by e-mail. The survey consisted of 6 statements (Table 2), and participants were asked to respond to the statements by using a modified Likert scale (1 [strongly disagree] to 6 [strongly agree]). More than 900 physicians (n = 906) responded to the survey. Not only were the results unaltered, but also striking was the willingness of a significant number of physicians to offer comments and allow their names to be used in this study (see In Their Own Words, below).

### Table 2. Survey Statements*

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<th>Statement</th>
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<td>1.</td>
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<td>I have experienced commercial bias while attending an accredited CME activity funded by a commercial interest.</td>
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<td>4.</td>
<td>The bias I have perceived in a CME activity has negatively affected my professional performance.</td>
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<tr>
<td>5.</td>
<td>I have experienced positive patient outcomes as a result of completing accredited CME activities funded by a commercial interest.</td>
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<td>6.</td>
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*Physicians surveyed were asked to rate, via a modified Likert scale, their degree of agreement with 6 questions. The rating scale ranged from 1 (strongly disagree) to 6 (strongly agree).

Survey Results

Among the 906 respondents, more than 80% disagreed with the proposition that all commercial support of CME should be eliminated, and fewer than 10% agreed with eliminating commercial support (Table 3). A majority of the physicians who took part in the survey (59%) said they did not experience bias while attending commercially supported CME programs. A similar majority (60%) found no bias in programs not supported by commercial interest. Importantly, 86% of the respondents (of the 894 who answered question no. 4) emphatically stated that neither they nor their practice performance had been negatively affected by bias in CME. To the contrary, 77% of the 897 individuals who answered question no. 5 reported that their patient outcomes were improved as a result of completing accredited CME programs funded by a commercial interest, and 76% reported having experienced positive patient outcomes by attending programs that were not supported by a commercial interest. Thus, the respondents in this survey saw no difference in CME influence on their practice between commercially supported programs and those produced without such support. Not only do these responses indicate that current regulations and accrediting requirements are more than sufficient to protect the integrity of the CME enterprise in the United States, but they also suggest that recommendations to eliminate commercial support of CME would simply serve, as noted by many survey respondents, to reduce the availability, not improve the quality, of CME programs for the busy clinician. These findings reinforce the high value physicians place on accredited CME activities supported by commercial entities, because they believe they derive important information and practice recommendations that enable them to provide better patient care and improve the health of their patients.

**Previous Studies Support Primary Care Network Findings**

The recent data from the Primary Care Network results are similar to the findings of a 2004 study by Mueller and coworkers who surveyed 1603 physicians who attended Mayo Clinic courses in internal medicine [11]. Of the 1130 physicians (70.5%) who completed the survey, 53% did not believe bias existed in CME programs supported by the pharmaceutical industry, and 62% agreed that industry support of CME programs should be allowed. Based on their results, these investigators offered recommendations regarding
commercial support of continuing education (see *Moving Forward to Continuous Improvement*, below).

A smaller, more recent study conducted by the Pri-Med Institute surveyed 268 physicians [12]. In this study, 92% disagreed with the proposal to eliminate commercial support of CME. The physicians in this sample suggested that CME would be more expensive to obtain, would experience a decrease in quality, and would be more difficult to obtain, thus hurting patient care.

These surveys demonstrate that a majority of practicing physicians, particularly primary care providers, recognize not only the important role of industry support in making low-cost, high-quality CME available, but also the potential dangers of possible bias caused by that support. It is noteworthy that in the survey conducted for the Primary Care Education Network reported in the present article, physicians provided expansive testimony on their ability to discern bias in the few cases that it occurs and are well able to disregard invalid data and to integrate information that is helpful to their daily challenges of managing patients with a host of different acute and chronic conditions. Furthermore, many physicians offered suggestions on how to address the concerns regarding the potential commercial influence on CME programming.

**In Their Own Words**

Of the 906 respondents, 371 individuals offered comments on the overall topic of commercial support of CME, and 159 of these respondents commented specifically on the proposal to eliminate commercial support of continuing education (see *Moving Forward to Continuous Improvement*, below).

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support of CME. Their remarks ranged from pointed outrage at the mere suggestion of eliminating such support (and thereby causing both an increase in the costs to access CME and feared reductions in the amount and quality of the CME available) to thoughtful suggestions on how to deal with the potential problem of biased content caused by commercial support. Following is a sampling of participant feedback on the role of commercial support of CME and its impact on participants’ practice behavior and patient care.

CME programs funded by industry are the keys to continuing education of the majority of clinicians. Academic medicine, in the absence of such funding, would be arrogant and naive to believe that such programs could be easily replaced. The vast majority of such programs are without bias and incredibly effective.

I am very opposed to this idea. I think it is an over reaction [sic] to a presumed but not a real problem. I would hope that the vast majority of doctors can distinguish commercials from science. I definitely feel that I am sufficiently intelligent to distinguish pure hype from valuable information. I don’t just depend upon one source for my information. And I never go to these meetings where there are not other doctors (and myself) who are asking challenging questions (sometimes even hostile) of the speakers . . . . I have gone to better programs that were supported by a drug company than some that were not.

Dumbing down physicians! Disclosure and disclaimers are sufficient caveats. According to this idea, medical journals should not accept advertising from pharmaceutical companies. I would like to read AMA’s and NEJM’s explanation of why it’s OK for them to accept 4 color full page ads from Big Pharma. Docs could actually be fooled into using bad drugs. Wow, we’re such boobs. We (docs) need to be protected by academic elitists.

I get so damned frustrated with idiots who think that I am not able to sort through data and presentations. I like to think that I can be presented information from various angles and decide what I can use effectively in my patient care.

As long as the speaker discloses his/her affiliation before the talk and isn’t biased toward a particular product, commercial support of CME allows physicians to hear from experts from around the county [sic], even if it is internet-based commercial supported activity.

CME, when well regulated by appropriate CME accreditation agencies, need not be biased, regardless of who is paying for it. It is up to the individual physician to take the information and use it as they see fit. I implore you: Do not interfere with my CME activities. One can make an argument the AMA is biased judging from the amount of advertising revenue she receives . . . . CEJA had better get off of its “holier than thou” pedestal and face the facts that even they have an agenda to promote and are biased themselves. By the way, I have no conflicts of interest to report aside from having to feed my family. I am biased in this way only.

CME events need funding; otherwise registration fees will become prohibitive, and attendance will decline. I am very much in support of commercial support. A lot of information is obtained when attending events sponsored by pharma companies.

Commercially supported CME is usually free, academic and society CME is usually expensive. In today’s reimbursement climate, we need more free CME, not less. I am perfectly capable of filtering out commercial bias when I encounter it (not often), and so are my fellow physicians. Quit trying to provide “protection” that is a thinly veiled attempt to force me to buy CME from you! (See, I can spot commercial motives from a mile away on a pitch black, moonless night!)

Eliminating all CME sponsored by a pharmaceutical [sic] may limit the amount of CME obtained by some physicians . . . . AMA should not make universal statements that all of these should be eliminated. Most of us have ethics that prevent us from letting a pharmaceutical company dictate what is best for our patients; AMA should not decide it is the all-powerful, all-knowing authority on how physicians get their CME!

The CME lectures provide excellent speakers knowledgeable in specific areas to different cities to bring first-hand, face-to-face objective medical information and provide the opportunity to ask specific direct [questions about] patient care information.

**DISCUSSION**

The current environment in which accredited CME programming is developed and delivered is highly regulated with oversight provided by numerous organizations and agencies. Despite the claims by some without a great deal of evidence [4,8], a significant impact of commercial CME support on content and the potential presence of bias have not been documented [1]. Furthermore, the recipients of this programming, practicing physicians, have spoken eloquently on the value they place on CME. Indeed, they are willing to spend time away from their families and practices to avail themselves of this education...
because they believe it provides important benefits to them and their patients. In addition, they see no qualitative difference between CME that is developed with commercial support and CME that is developed without support from commercial entities. Moreover, primary care providers (as well as specialists) are highly educated and are capable of recognizing bias should it occur.

Furthermore, as the debate has raged on, the vast majority of physicians and other health care providers have rejected the proposals to eliminate commercial support. There are growing demands for evidence as the reports of dangers and negative implications have increased. Like our survey participants, Stossel has replied to the charges of bias and negative impact by saying that pharmaceutical companies “maximize profitability by coming up with products that benefit patients” and that “corporate support of educational activities enables physicians to sustain their patient care activities.” Thus, it is in their interest to serve the interests of patients [13]. He further points out that at a time when public support of biomedical research is not meeting research opportunities, when medical students are laden with debts, and when organized medicine must desperately fight to sustain physician-reimbursement rates, the wisdom—indeed the ethics—of arbitrarily discarding a major source of revenue for medical education is questionable. According to Stossel, “The challenges of medical care, medical innovation, and medical education are not well served by recrimination and sanctimony and certainly not by the poor scholarship represented by Brennan and colleagues” [13].

Moving Forward to Continuous Improvement

As has been the pattern in recent decades, efforts continue to be made to improve the quality of CME and to ensure that it is scientifically rigorous, free of commercial influence, and fairly balanced. To accomplish these objectives, many have called for more evidence. In an independent literature review, Cervero and He recommend a more rigorous search for evidence that commercial support produces bias [9]. They offer several questions for consideration:

- Does commercial support produce bias in CME activities?
- What are the mechanisms by which bias is produced?
- Are accreditation guidelines or other strategies effective in preventing bias?
- In what ways does commercial support of CME contribute to physicians’ adoption of the sponsor’s product in the context of the other influences on their clinical decision making?
- As a result of commercially supported CME, does physician adoption of the sponsor’s product lead to improved patient care?

In considering the issue, Mueller et al [11] make the following recommendations:

- Industry support must be completely unrestricted.
- All CME faculty conflicts of interest must be declared before the program begins.
- The industry sponsor should have no role in the planning or evaluation of program content.
- The topics should be presented without bias, particularly if the products of the industry sponsor are discussed.
- Support should not be given to participants but to the program organizers to reduce registration fees.

It is noteworthy that most of Mueller’s recommendations are aligned with current guidelines [1,5-7].

Taking a more streamlined approach, the ACCME notes 3 likely scenarios: Do nothing, completely eliminate commercial support of CME, or develop a new paradigm [1].

Stossel recommends that only if an objective risk-benefit analysis confirms that corruption is prevalent and is leading to an answer in the negative should we engage in radical ethics reforms, and if we do, we must clearly define the ethics framework [13].

It is likely that a modified approach, if not a new paradigm, will be followed. Regardless of the route taken, the ACCME declared that the “debate should not go on without discussion of alternatives as nothing would be worse than the deconstruction of a system without the identification of alternatives” [1].

CONCLUSION

We believe that the data presented in this survey not only support the calls for more significant research into the effect of commercial support on the development of CME but also speak to the critical role of the practicing physician in determining how best to meet the educational need and fill the gaps in knowledge and practice. We support the position expressed by Levine and Christensen of the Coalition for Healthcare Communication [14]. As has been observed by many, true knowledge occurs when we know that we know what we know as well as what we do not know. Proposals for radical change in the absence of evidence may not improve the effectiveness of CME and may not be of benefit to physicians and the patients for whom they dedicate their time and talents.

REFERENCES


