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THE ENDOCRINE SOCIETY ETHICS ADVISORY COMMITTEE: Ethical Aspects of Conflicts of Interests, October 2003

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The 2002–2003 Ethics Advisory Committee would like to thank the 2003–2004 Ethics Advisory Committee members for their contributions: Stanley G. Korenman, M.D.; Ursula Kuhnle, M.D.; James N. Sullivan, M.D.; and Associates Council liaison, Maria Henwood, D.O. The committee greatly appreciates comments and suggestions submitted by Society members. The Ethics Advisory Committee gratefully acknowledges the invaluable support provided by The Endocrine Society staff: Joan Zaro, Ph.D., Senior Director of Governance and Policy; and Jeanie Dow, Executive Office Administrative Assistant.

Table of Contents

1. Executive Summary

Financial and other dualities and conflicts of interests (COI) arise in many different contexts in the work of The Society. The Ethics Advisory Committee has developed guidelines to assist members and officers of The Society to identify and manage such dualities and COI. Adopting a practical, non-punitive approach, specific issues and examples are examined relating both to the conduct of Society business and to that of individual members. Particular attention is given to questions arising with respect to publications, relations with industry, clinical research, basic research, clinical practice, and the training of physicians and scientists. In each of these areas, specific recommendations are made to help with the resolution of problems.

The guidelines stress that effective management of COI lies in identifying them, making clear declarations, maintaining openness and transparency, and developing appropriate structures to deal with specific issues. Specifically, it is suggested that the following sequence of events may prove helpful:

1. individuals in identified areas of activity declare dualities of interest, whether financial or non-financial;
2. these are considered by the relevant community—*e.g.* a committee or council or group of individuals directly affected;
3. an assessment is made concerning whether the dualities constitute a potential or actual conflict;
4. if it appears that a COI is present or likely, practical

strategies are devised to separate the pursuit of the conflicting interests; in some cases, this may entail withdrawal from or curtailing of a particular activity, whereas in others, it may be sufficient to delegate functions or roles to an individual, a group of individuals, or a committee; and
5. the decisions and practical outcomes are communicated to the constituency affected.

Policies in specific areas that apply these principles in practical settings are in the process of being developed and will complement this document by providing detailed guidance for members and officers of The Society. These policies will cover procedures for addressing problems that arise in the various settings outlined below, including disclosure forms, endorsements, and issues arising in relation to clinical practice and research.

It is hoped that the guidelines will assist members in achieving and preserving the highest quality of individual and community health care and research, to the benefit of both medicine and the broader community.

2. Introduction and Purpose

The Endocrine Society acknowledges that financial and other dualities and COI arise in many different contexts in the work of The Society, in clinical, academic, and other professional practices and in research. In view of this, The Society's Ethics Advisory Committee has developed this document, which includes a discussion of the nature of conflicts and "dualities" of interests, a statement of general principles regarding their appropriate management, analysis of the various contexts in which conflicts and dualities may arise for members and officers of The Society, and specific recommendations to provide guidance in particular settings. The document is intended to provide a resource for those faced with dualities or potential conflicts of interest and to stimulate reflection and discussion within the community.

The general guidelines proposed here affirm that, in general, the key to effective management of COI lies in a systematic approach that involves identifying them, making clear declarations and maintaining openness and transparency, and developing appropriate structures to deal with specific issues. It is recognized, however, that the application of principles must always assume the common sense and integrity of the individuals for whom they are written and be subject to the details of the particular issues under consideration. It is hoped that this document will assist members both in clarifying their personal views and in enhancing their abilities to recognize and analyze settings that could give rise to COI.

The overall purpose of this document is to contribute to the achievement and preservation of the highest quality of individual and community health care and research, to the benefit of both medicine and the broader community. Because community attitudes and standards change, it is assumed that the material presented here should be available for public scrutiny and subject to revision as necessary. Accordingly, active debate and critical comment about this material is strongly encouraged.

3. Definition of COI

Although many different ways of defining COI have been proposed all refer in some manner to the existence of relationships based on trust, reliance or dependence in which a potential conflict arises between duties or preferred courses of action. The Endocrine Society Code of Ethics provides a definition of "interests" and draws attention to the distinction between "dualities" and "conflicts" of interest, in the following terms:

''An **interest** is a commitment, goal, or value arising out of a social relationship or practice. A **duality of interest** arises when two or more interests are potentially in conflict, depending on the specific circumstances of an individual case. A **conflict of interest** exists when a particular relationship or practice gives rise to two or more contradictory interests.''[1]

This definition emphasizes certain important points, which are assumed in the remainder of this document:

1. The existence of dualities of interest is a fact of modern life, which reflects the diversity of modern societies and the plurality of roles individuals occupy within them. Inevitably, different roles may give rise to varying obligations, which, on occasions, may erupt into conflicts.
2. Whereas in common usage, the term "COI" is often taken to imply the existence of unethical behavior, in reality, conflicts generally arise structurally in the absence of unethical behavior. That is, COI arise out of the facts and not from malign motivations.
3. Conflicts and dualities of interests include both financial and non-financial issues. In the medical and research settings, the latter are often the most important and subtle.
4. Resolution or avoidance of conflicts requires local action, which usually includes disclosure and debate to the relevant community and development of specifically devised institutional structures.

4. The Current Regulatory Environment

The area of COI is subject to a complex array of government and institutional requirements that vary from context to context. Individuals should ensure that they are familiar with the rules that apply in their own work settings. In general, these rules tend to emphasize financial COI and to set standards for disclosure and reporting. It is important to remember, however, that dualities and conflicts of interest are not restricted to financial matters and that, although transparency is important, it is often not sufficient to ensure adequate protection of all the parties involved.

The National Institutes of Health (NIH), Food and Drug Administration (FDA), and professional associations have all developed policies on COI, which are broadly similar but not identical. The NIH has tended to discourage researchers from holding equity interest in any company that could be affected by their research and requiring disclosure of all financial interests by investigators, regardless of the relevance of such arrangements to their research. The FDA rules

[1] Korenman, S., *et al.* Code of Ethics of The Endocrine Society, p. 2

limit their attention to "significant financial interests" that "would reasonably appear to be affected by the research" and require researchers to "manage, reduce, or eliminate" the interest within 60 days. Many professional associations have developed their own policies. One influential example is that of the American Association of Medical Colleges, which regards "all significant financial interests in human subjects research as potentially problematic" and proposes "the rebuttable presumption that an individual who holds a significant financial interest in research involving human subjects may not conduct such research," with the intention of limiting the conduct of human subjects research by financially interested individuals to those situations in which the circumstances are "compelling".[2]

5. General Principles for Dealing with Dualities and COI

In general, dualities and conflicts should be dealt with in an open and transparent manner. However, in many cases, this will not be sufficient. A suggested sequence of events, which may often prove helpful, is as follows:

1. Individuals in identified areas of activity are required to declare dualities of interest, whether financial or non-financial.
2. These are considered by the relevant community—*e.g.* a committee or council or group of individuals directly affected.
3. An assessment is made concerning whether the dualities constitute a potential or actual conflict.
4. If it appears that a COI is present or likely, practical strategies are devised to separate the pursuit of the conflicting interests. In some cases, this may entail withdrawal from or curtailing of a particular activity; in others, it may be sufficient to find an independent person to conduct one of the functions or to appoint a committee or group of individuals to discharge the particular function involved.
5. The decisions and practical outcomes are communicated to the constituency affected to ensure continuing transparency.

The details associated with each of these steps will, of course, vary according to the circumstances and the context.

6. COI Relating to the Conduct of Society Business

There are many settings in which dualities and conflicts of interest may arise in the conduct of Society business. These include The Society's publications; dealings between pharmaceutical companies and The Society, including sponsorships of meetings; various Society programs, including web site programs, product advertising, and unrestricted grants. Personal interests, including shareholdings, of Council, Committee members, and employees can also raise the potential for COI.

6.1 Some examples of possible COI relating to conduct of Endocrine Society business

- Proposed reviewers for an article submitted to an Endocrine Society journal are known to be involved in similar or competing research.
- A member of the Publications Committee sees manuscripts that could bear on products produced or marketed by a company in which he is involved.
- A member of the Annual Meeting Steering Committee has financial interests that could be promoted through the selection of certain topics or the choice of certain meeting speakers.
- The Society is offered grants from industry for fellowships or organization of meetings.
- The Society risks offending industry by publishing material critical of certain marketing practices.

6.2 Publications

One of the key functions of The Society is to contribute to the development of the understanding of endocrinology by sponsoring the publication of scientific journals. For an organization engaged in publishing, there are several settings in which COI can arise. These include circumstances in which editors, reviewers, or members of the Publications Committee have a personal interest in the content of an article submitted for publication: perhaps the most common example of this is when a reviewer is working in a similar area and could benefit from a delay in the publication of the article in question; a somewhat more rare example would be circumstances in which an editor could possibly benefit from promotion of his or her own work. COI could also arise in relation to an article submitted for publication may have implications for The Society as a whole—for example, when it reflects on the practices of sponsors of The Society. Journals often obtain significant earnings from reprints bought by sponsors for distribution to physicians: the possibility of such payments also has the capacity to influence editorial decision making.

Authors' disclosures should be required in all cases and published together with the corresponding articles. Reviewers, editors, and committee members associated with publications should be asked to declare dualities of interest and those with significant COI should be excluded from consideration of the particular manuscripts involved. Journal editors should also recuse themselves from reviewing work in which a potential or actual COI exists and transfer responsibility to an alternative editor. When a journal achieves substantial income from sale of reprints this should be disclosed to readers.

The Society also has responsibility for ensuring that adequate declarations are sought from presenters at scientific meetings organized by The Society and in any publications, including abstract books, associated with such meetings. When there is doubt about the possible implications of a

[2] Association of American Colleges, "Protecting Subjects, Preserving Trust, Promoting Progress–Policy and Guidelines for the Oversight of Individual Financial Interests in Human Subjects Research Task Force on Financial Conflicts of Interest in Clinical Research", December 2001, p. 7

particular article or other publishing issue for The Society, the matter should be reviewed by an independent committee.

6.3 Relations with industry

Scientific societies and industry have a mutually beneficial relationship in which The Society receives substantial financial support and industry has an unparalleled opportunity to showcase its advances to a sophisticated and responsive audience.[3] However, the question of relations between the professions and industry is a very sensitive one in the community, and it is acknowledged that there are many settings in which COI arise and associations between The Society and industry can lead to compromise of The Society's objectives and public standing.

For example, funding received from industry is often associated with an assumption that a reciprocal benefit will follow. Officers of The Society may be concerned that sponsorship of The Society has many opportunities to benefit from marketing royalties on products such as credit cards, insurance, and stationery. It can also benefit from the sale of its membership list. The Society may be approached to participate in the marketing of medical products as well. It is important to recognize that the mere fact of an association with private industry may lead to a duality between the interest in strengthening the financial base of The Society and that of being publicly identified as an independent, disinterested contributor to debates about health and health policy.

Full disclosure of sponsorship of meetings and maintenance of independence in determining scientific content (including selection of sessions and speakers) are necessary. Even with safeguards, the risk remains that meetings (and sessions) may appear to be influenced by commercial enterprises. Complete disclosure of commercial support is required for all Society-sponsored activities, as well as a balanced and objective presentation of data related to commercial products. Speakers should be required to indicate any dualities of interest at the time of their presentations, including any relationship to the session sponsor. Speakers should also be asked explicitly to ensure balanced presentations related to controversial issues, including presentation of advantages and disadvantages of specific therapies.

Although commercial sponsors may wish to pay the costs of individuals who attend a supported meeting, this often creates serious dualities of interest. It is acceptable for trainees to receive funds to cover the costs of attending educational conferences, provided that the selection of the recipient is made by the training institution. Travel support for speakers is acceptable as part of their compensation.[4]

Sources of commercial funding should not influence the scientific, educational or public policy decisions of The Society. Commercial supporters should not be able to influence the planning, content, speaker selection, or execution of any program of The Society, and commercial sponsorships should not influence the subject matter of the annual meeting. It should be made clear that the display of commercial products or services at Society meetings, advertisements in The Society's journals, or social event sponsorship are not to be taken to imply warranty, endorsement, or approval of these products or services, or effectiveness, quality or safety.[5]

While it is certainly appropriate for The Society to promote the study and increased awareness of specific medical conditions and to take positions regarding endocrine disorders and their treatment in the interest of public health, it is essential that the objectivity and credibility of The Society are not compromised through support for specific treatments or products. To avoid such compromise, The Society should maintain a process of formal internal review of this aspect of its work.[6] On occasions, The Society may make available to its members specific goods or services as a benefit (for example, discounts or group availability); however, in these cases, the rationale of the endorsement and the benefits to The Society members should be fully disclosed in advance.[7]

6.4 Summary of practical strategies for dealing with COI with respect to Society business

Dualities and conflicts of interest in the conduct of the business of The Society, including the publication process, should be approached in a systematic manner, which should at the least include the following steps:

- Establishment of a defined process for identifying dualities and assessing their potential to constitute conflicts and, if necessary, the development of strategies in response.
- Disclosure of financial and other interests to an appropriate forum within The Society, possibly to a small committee that includes representation from Council, the Publications Committee, Ethics Advisory Committee, and staff.
- Assessment of which interests are potentially relevant to the conduct of Society business and examination of potential for conflict.
- In the case of conflict, development of strategies to avoid compromise of either the individual involved or the work of The Society.
- Public disclosure of the outcomes of this process in an appropriate form.

7. COI Relating to the Conduct of Individual Members of The Society

7.1 COI relating to research

COI can arise in research as a result of the fact that investigators are paid for their services or have an interest in the outcome. Special issues arise in relation to investigator-initiated research, epidemiological research, and research undertaken by academics or industry employees such as clinicians, including private practitioners. Questions that may need to be considered relate to the design of studies, the consent process, controls and analyses of the data, and de-

[3] Korenman, S., *et al.* Code of Ethics of The Endocrine Society, p. 2

[4] Korenman, S., *et al.* Code of Ethics of The Endocrine Society, p. 3

[5] Korenman, S., *et al.* Code of Ethics of The Endocrine Society, p. 3

[6] Korenman, S., *et al.* Code of Ethics of The Endocrine Society, p. 3

[7] Korenman, S., *et al.* Code of Ethics of The Endocrine Society, p. 3

cisions about publication. There may be direct and indirect conflicts arising from payments for services rendered, both for clinicians and as researchers involved in clinical research; what is "fair payment for services rendered" may not be unambiguous. There may be many non-financial motivations involved, including the possibility of increasing status, achieving fame, and advancing a career. In many cases these may be more important than financial considerations.

The arguments about whether investigators with a direct interest in the outcomes of research should be permitted to participate in such research are complex, as, indeed, are the organization and structure of individual research projects. It is important that this complexity, and the full range of dualities and conflicts arising in relation to research, is appreciated and that a flexible, case-specific approach is maintained. In individual instances, it is often possible to identify specific pressure points at which dualities may erupt into conflicts and to devise specific strategies to protect the integrity of the research process.

7.1.1 Some examples of COI involving researchers

- A researcher has a direct financial interest in the outcome of a trial in which he/she is engaged, in the form of shares, share options, and bonuses.
- A researcher stands to gain in non-financial ways by success of a trial, by enhanced public status or career prospects.
- A physician/researcher recruits his own patients for a study in which he/she is involved.
- A researcher is paid for conducting a study by a drug company.
- A researcher is employed directly by pharmaceutical company.
- A researcher is asked to review a paper or grant application that bears on his/her own work
- A researcher has to make a decision about whether to publish unfavorable or negative results, as a result of which his/her career may be damaged and financial benefits may be lost.

7.1.2 Clinical research

Competing interests (dualities) are inherent in clinical research and lead to the potential for real or perceived COI. Such interests include a primary commitment to provide optimal patient care and protect the patient, as well as the desire to advance scientific knowledge, and to achieve professional recognition. In addition, clinical researchers may have financial interests in the conduct or outcome of clinical trials. Opportunities to profit from research financially or academically may affect—or appear to affect—a researcher's judgments related to the primary obligation to protect the interests of the patient.

Clinical researchers may benefit from their research *financially* through investment in, or ownership of, companies sponsoring clinical trials, in which the investigator has an interest in the outcome of the trial, or payment for work performed in enrolling and managing patients in a study. They may also benefit from their research through *non-financial* means such as career advancement based on reporting of new scientific information and academic recognition through association with successful landmark clinical research.

In dealing with such conflicts, significant financial interests in human-subjects research should be disclosed to regulators as required by statute or regulation, to research funders or sponsors, to the editors of any publication to which a covered individual submits a manuscript concerning the research, and in any substantive public communication of the research results, whether oral or written. Financial compensation for participating as an investigator in a clinical trial should be commensurate with work performed. In no event should referral fees be paid to investigators or other clinicians. Any assistance received for a project should be paid into a specially designated fund established for the conduct of clinical research and which is subject to auspice and audit according to established institutional guidelines.

Research consent forms should disclose the existence of any significant financial interest held by individuals involved in conducting the clinical trial. Guidelines published by the United States FDA[8] regarding financial disclosure of clinical investigators require that sponsors of clinical trials collect data on clinical investigators, including compensation affected by the outcome of the study, significant equity interest in the study sponsor, a proprietary interest in the tested product, and other payments to the investigator from the sponsor. Other guidelines for reference include the National Science Foundation Investigator Financial Disclosure Policy,[9] United States Public Health Service Objectivity in Research Policy,[10] and the NIH Guidelines for the Inclusion of Women and Minorities as Subjects in Clinical Research.[11] Clinical Research Centers, which operate under the auspices of the NIH, utilize "Research Subject Advocates" to assist in the interpretation of the clinical and scientific aspects of the protocol and to facilitate both regulatory compliance and patient safety. Obviously, in all cases, relevant government and institutional guidelines should be observed. In the case of non-federally funded research studies to which this extensive system of regulations and guidelines does not formally apply, the standards established for federally funded projects should be the minimum standards that are followed.

Clinical researchers may influence study design (including selection of study drug doses and comparison with placebo or active comparator), patient selection, data collection and analysis, adverse event reporting, or the presentation and publication of research findings. There is an obligation on both the researcher and the institutional review board (IRB) to assure an adequate study design to accomplish the study

[8] US FDA "Financial Disclosure of Clinical Investigators" (63 FR 5233 (1997): http://www.cftc.gov/files/foia/fedreg98/foi980202a.pdf

[9] National Science Foundation, Investigator Financial Disclosure Policy, available online at http://www4.od.nih.gov/orwh/outreach.pdf

[10] National Institutes of Health, Objectivity in Research available online at http://www.grants.nih.gov/grants/guide/notice-files/not95–179.html

[11] National Institutes of Health, Guidelines for the Inclusion of Women and Minorities as Subjects in Clinical Research: http://grants.nih.gov/grants/funding/women_min/guidelines_update.htm

objectives. Where dualities arise—as in the examples mentioned above—special arrangements may need to be created to separate the decision-making functions that could be at odds. These will often include the appointment of independent researchers to approach and interact with participants; arm's-length processes to collect, store, and analyze data and to monitor safety; and the development of clear policies regarding publication or dissemination of results. The complexity of these arrangements will depend on the nature of the duality and the structure of the research project itself.

7.1.3 Basic research

As with clinical research, COI can arise in basic research as a result of financial interests and the principles for dealing with these are the same. Examples of such conflicts include cases in which investigators are paid for specific services or when a pharmaceutical or biotechnology company funds a project overall. Financial conflicts may also arise when an investigator becomes involved in a commercial venture that may conflict with other aspects of his or her own research; in this case, more subtle conflicts may also arise as a result of diversion of faculty effort from the university to the financial entity. Conflicts of these kinds are usually dealt with at the level of the institution. Competing interests between a company and an investigator in the academic setting may also pose a threat to open scientific discourse.

In addition to financial COI, conflicts can occur between the interests of mentors and of their students (discussed in 8.2). As many basic science laboratories train graduate students and postdoctoral fellows in the course of the research, the responsibilities of the mentors and trainees must be clearly defined (see 8.2.1). Other non-pecuniary conflicts of interest in basic research can also arise from the peer-review process used for grant and manuscript reviews. Peer review requires that reviewers are not only knowledgeable, but are also objective and impartial, and that the reviewer's interests do not bias the outcome of the review. Investigators may benefit from the review process by delaying or rejecting publication of a competing manuscript, by giving a competing grant a score that would not garner funding, or by gleaning information from a manuscript or grant they are reviewing that may be useful to their own research.

Control of COI in the peer-review process may be very difficult as the system relies heavily on the good faith of reviewers. Journals and granting bodies should routinely require statements of dualities of interest and should emphasize that, when conflicts exist, reviewers should have a low threshold for recusing themselves. In general, the more open and transparent the process the more likely it is that conflicts will be contained.

7.1.4 Summary of strategies for dealing with COI in the conduct of research

- Significant financial interests should be disclosed.
- Investigators should not derive direct personal or financial benefit from the conduct of a pharmaceutical company-sponsored clinical trial.
- Adequate compensation should be provided for personal expenses arising from the trial, including reimbursement of practice expenses.
- Compensation must reasonably relate to income or time lost and should be administered under a contractual arrangement open to scrutiny.
- When the possibility of a COI arises, special arrangements should be made to separate the conflicting functions: for example, by the appointment of independent individuals or committees to communicate with patients or collect or manage data.
- Remuneration should be paid into a fund that is used to finance execution of the study and subject to appropriate institutional audit.

7.2 Publications

Possible ways in which dualities or conflicts of interest may arise in the field of publications, and strategies to deal with them, have been discussed above. Authors and those asked to act as reviewers of articles should take care to disclose financial or other interests. Some journals require additional disclosure in reporting the results of sponsored clinical trials, such as ownership of the data and contributions of the named authors, including persons responsible for the analysis and drafting the manuscript. The peer-review process raises other issues concerning dualities of interest on many occasions. Reviewers are called upon to exercise their judgment in a fair and reasonable manner and to recuse themselves if they are unable to do so.

There is a tendency to favor publication of results of "positive" clinical trials, even though much can undoubtedly also be learned from "negative" studies. Both authors and journals should support attempts to publish the results of all clinical trials when scientifically appropriate.

7.2.1 Recommendations concerning publications

- Authors should make full disclosures in reporting the results of sponsored clinical trials, including the contributions of the named authors, who conducted the analysis, who wrote the paper, and who owns the data.
- Publication of data should not be limited by the commercial interests and contracts with sponsors should reflect this.
- Reviewers should declare dualities and take pains to ensure that their comments are not influenced by personal interests.

7.3 COI within the clinical practice setting

Dualities and conflicts of interest in clinical settings may arise from the relationships of physicians with the pharmaceutical industry and with regard to research, teaching, and other professional and employment responsibilities. They include involvement of physicians in and interactions with managed care organizations, educational opportunities funded by third parties, and honoraria for participation in education programs. The principle guiding the development of policies regarding dualities on interests relating to the

clinical setting is that the relationship between physician and patient should not be compromised by commercial or other interests that could subvert the principle that the interests of the patient should be primary.

7.3.1 Some examples of COI involving clinicians

- A clinician is offered money by a contract research organization to supply lists of names of his/her patients.
- A clinician is offered an airfare by a pharmaceutical company to travel to an international meeting.
- A clinician is offered gifts from a pharmaceutical company representative.
- A clinician involved in research considers recruiting his own patients.
- A clinician employed by a private company is offered bonuses tied to profits.

7.3.2 Physicians and the pharmaceutical industry

Of particular concern to the public and to physicians are relationships of physicians with the pharmaceutical industry. Physicians and the pharmaceutical industry share common goals in that they are engaged in the treatment of disease and the conduct of research directed toward improvements in treatment. However, there are also divergent interests, as a result of the fact that the primary responsibilities of those working in industry are to their shareholders, whereas physicians act as the agents of their patients.

The promotional activities of the industry attract special attention. These can take many forms, including overt advertising and the provision of gifts and perquisites to individual physicians or to their employing institutions. Arrangements between physicians and pharmaceutical companies should be open and transparent. When the possibility of a COI could be raised, regardless of the context, this should be declared openly to all relevant parties. In many cases this will require disclosure of financial or other arrangements to institutions, ethics committees, patients, potential research subjects, and others. Such disclosures of dualities do not in themselves imply the existence of COI but merely allow public scrutiny to ensure that such conflicts do not develop. The ultimate test for the effective management of COI in this setting is that benefits received from pharmaceutical companies—whether in cash or in kind, or as gifts, hospitality, or subsidies—leave physicians' independence of judgment unimpaired and do not influence decisions they might make concerning the welfare of their patients.

7.3.3 Gifts and entertainment provided to physicians

There is evidence that acceptance of gifts by physicians is associated with an increased likelihood that they will prescribe products produced by pharmaceutical companies, even in the absence of scientific data to support such clinical decisions.[12] This includes not only discrete gift items, but also payment for dinners, entertainment, or expenses associated with daily living. Physicians must judge for themselves what is and is not acceptable but, to avoid impairment of their judgment, should err on the side of rejection of gifts. In particular, whereas service-oriented items may on occasions be acceptable—for example, patient counseling or teaching aids—non-service-oriented items should in general not be accepted.

7.3.4 Remuneration for services and consultancies

Individual physicians may act as consultants for, or provide other services to, pharmaceutical or other companies, and physicians are entitled to fair remuneration for the services they provide. However, such relationships with industry often create dualities of interests and may on occasion produce the impression of a conflict between duties to industry and to patients. For example, if a physician becomes publicly associated with the products of a particular company, the question may be raised as to whether his or her recommendations to patients are based on an unbiased assessment of equivalent, perhaps cheaper, products from other companies.

The relationship of a physician with a particular company should be reported to and recognized by all relevant committees as well as to the physicians' patients. The ways in which the details of such a relationship are reported will vary from setting to setting depending on the nature and rules of operation of the committee, and may include submission of prescribed forms, public notices, or simply verbal communications.

7.3.5 Employment

Physicians may be directly employed in the pharmaceutical industry or by HMOs or other managed-care organizations. In these circumstances COI may arise because of requirements imposed on physicians as conditions of their employment. For example, managed-care organizations commonly impose limits on the amount of care and kinds of treatments that are available and may actively intervene in the clinical relationship to direct doctors' decisions.

The implications of such employment arrangements have been discussed elsewhere.[13] When conflicts arise, physicians should inform their patients of the nature of the differences and their implications. In some cases, they may need to make difficult decisions about whether it is ethical to continue to work in this setting.

7.3.6 Industry sponsorship for meetings, including for travel and accommodation for individual physicians

The pharmaceutical industry provides sponsorship for organizing meetings and to physicians for attending them.

[12] Komesaroff PA, Kerridge IH. "Ethical issues in the relationships between medical practitioners and the pharmaceutical industry". *Med J Aust* 2002, 176:118–121

[13] Komesaroff PA, Patterson CG. "Managed care—managed ethics". *Med J Aust* 2000, 172:609–611

While this sponsorship is provided with the expressed aim of contributing to continuing education, the manner in which it is provided may leave the reasons for its provision open to other interpretations. In addition, there is evidence that such sponsorship affects the decisions physicians make in their clinical practices. In particular, there is evidence that clinical decisions are often not based on objective scientific data and may not contribute optimally to patient care.[14,15] Accordingly, sponsorship of this sort carries a clear risk of influencing physicians' capacities to make disinterested decisions on behalf of their patients. In view of this risk, great care should be exercised before accepting travel sponsorship or gifts and in ensuring that the nature of sponsorship or gifts and any obligations associated with them are declared openly to those with an interest in knowing.

The ideal manner for industry to provide sponsorship of scientific meetings is through independent organizing bodies for which the costs of bringing in invited speakers are defrayed by the funds provided by industry, with the cost of travel and attending such meetings met by physicians because of their educational value. In accepting sponsorship outside these arrangements, the physician needs to determine that the sponsorship is clearly linked to education; that there is no loss of professional independence through accepting the sponsorship; and that there would be no reservation regarding the sponsorship being publicly scrutinized.

In addition to support for clinical and scientific meetings organized by independent organizing committees, pharmaceutical companies provide sponsorship to physicians to participate in a variety of meetings. These include launches of pharmaceutical products, local meetings of specialist groups that usually have an independent organizer or organizing committee, and hospital grand rounds and departmental scientific meetings. While these meetings usually have a clearly defined primary educational aim, they may be open to the suspicion that they will result in clinical decisions of physicians being influenced by their personal associations with aspects of the pharmaceutical industry. Physicians involved in organizing or attending such meetings need to have a high level of awareness of this risk. They should take care to avoid any secrecy regarding the source and extent of sponsorship and take deliberate steps to ensure that the primary educational purposes of the meetings are achieved.

7.3.7 Physicians involved in clinical research

COI arising in the setting of clinical research have been addressed above. A particular issue for practicing physicians concerns the recruitment of patients under their care for research studies in which they are personally involved. This raises the possibility of a conflict between a physician's interest in conducting the research most effectively and that of making clinical judgments in the best interests of his or her patients.

In general, it is undesirable for physicians engaged in research involving their own patients to be primarily responsible for the conduct of the consent process. Where possible, information should be provided and discussion should be undertaken through third parties who do not have a clinical relationship with the patients involved. In the event that a patient of a physician is recruited for a research study in which the physician is involved, it is imperative that the latter explain clearly the nature of his or her involvement, the risks involved, and the advantages or disadvantages of participation by the patient.

When, in a particular research project, a conflict could arise between the requirements of research and those of clinical decision making it is essential that a clear disclosure be made to the patient, together with a presentation of the options available to him or her. In many cases it will be appropriate for the physician to cease to manage the patient clinically during the conduct of that project, at least in relation to the particular issues that are addressed in it.

7.3.8 Summary of strategies for dealing with COI within the clinical practice setting

- Significant financial and non-financial interests that could compete with patient care should be disclosed.
- When the possibility of a COI arises, special arrangements should be made to avoid the conflict or to separate the relevant functions: for example, either by refusing an offer for sponsorship or by the appointment of an independent researcher to approach potential participants in research.
- Physicians should take care with respect to acceptance of gifts or other perquisites from industry, when possible limiting the acceptance to those of direct relevance to patient care.
- Acceptance of travel sponsorship to a meeting should generally be limited to physicians making an active contribution.
- Adequate payments should be made for services provided, including reimbursement of practice expenses, and should be administered under a contractual arrangement open to scrutiny.

8. COI Arising in Other Settings

There are various other settings in which dualities of interests or COI may arise. These include educational contexts involving the training of physicians or scientists, circumstances involving arrangements between pharmaceutical companies and institutions or university departments, other cases involving paid employment and teaching responsibilities—within universities, institutes, and private industry, and the conduct of the work of IRBs or ethics committees.

[14] Bowman, *J Contin Educ Health Prof* 1988, 8:13–20

[15] Chren MM, Landefeld CS. "Physicians' behavior and their interactions with drug companies. A controlled study of physicians who requested additions to a hospital drug formulary." *JAMA* 1994, 271: 684–689

8.1 Examples of COI arising in other settings

- A mentor requires a valuable trainee to complete an ever-increasing number of experiments before he/she will support her move to the next level.
- A trainee is afraid to disagree with her mentor on a course of action with a patient despite his/her close familiarity with the case.
- A trainee is hesitant to discuss perceived unfairness on the part of his/her mentor with other departmental members for fear that such a discussion would cause his/her to lose favor with her mentor.
- A researcher wishes to use a student to complete a project that might not directly contribute to the latter's educational needs.
- A member of an IRB or ethics committee has previous or existing relations with a drug company submitting a study or a competitor.

8.2 Training of physicians and scientists

For the most part, trainees and their mentors are subject to the same dualities and conflicts as everyone else. However, there are a few COI that may be specific to the training experience. Within the trainee-mentor relationship, dualities can arise as a result of the potential imbalance of power between the two parties. A mentor may be tempted to use his or her power in a manner that does not serve the best interests of the trainee. For instance, he or she may employ tactics to keep a trainee in his or her laboratory for longer than is ideal for the trainee, while, on the other hand, a trainee may feel under pressure to please a mentor, on whose word his or her future career may depend. In the laboratory, such lack of open communication may lead to additional expenses; in the clinic, it may lead to serious compromise of the welfare of a patient.

For an institution, training of medical personnel requires a balance between the best interests of patients and the quality of the training experience. Obviously, medical trainees must receive experience with real patients; however, institutions must maintain consistent and excellent supervision over medical trainees, and, whenever possible, provide opportunities for medical students to practice, prior to or in conjunction with patient contact, on physical and computer models and each other, when these alternatives are instructional and safe.

Many trainees feel unable to reveal to other departmental members conflicts they are experiencing with their advisers for fear of recriminations or breach of their confidences. In view of the wide range of complex issues that can arise—even with the best intentions of both parties—in the trainee-mentor relationship there is a need for institutions to provide independent ombudspersons who can provide confidential advice to trainees and help avoid or resolve conflicts.

Medical students, residents, and fellows commonly receive support from pharmaceutical companies to travel to meetings. As discussed above, such support is acceptable only if the meetings have genuine educational content and the selection of the recipient is made by the training institution rather than the sponsoring company.

Management of dualities in the training relationship requires clear definition of the responsibilities of teachers, trainees, and institutions. *Responsibilities of teachers* include remaining aware of students' natural motivation to please their mentors; recognizing, and avoiding taking advantage of, the imbalance of power that exists; and impressing upon students the highest respect for scientific values. *Responsibilities of trainees* include expressing personal judgments candidly, whether in the clinical or the experimental setting; utilizing designated confidants (such as institutional ombudspersons) when needed; and refusing to compromise patient care or research effort in order to avoid conflict with the mentor. *Responsibilities of institutions* include providing third parties for trainees to consult, educating mentors about potential tensions in their relationships with trainees that could lead to COI, and working to minimize conflicts between the best patient care and the best training experience.

8.2.1 Summary of strategies for dealing with COI within the training setting

- As with all dualities, clear acknowledgment of the issues by all the parties involved, and open, frank dialogue, will contribute significantly towards limiting adverse outcomes.
- When this is not sufficient, special arrangements, such as utilization of the services of independent third parties, may need to be invoked to separate conflicting functions or make decisions in relation to them.

8.3 Responsibilities of physicians as members of ethics committees, IRBs, and related committees

Individuals may be called upon to become members of IRBs or ethics, research, or drug committees and should be ready to make their particular expertise available when asked to do so. A committee may be asked to consider a variety of applications that have been developed jointly by an investigator and a pharmaceutical company as a local project or part of a multi-center trial. Physicians and researchers who are personally involved in such projects should absent themselves from discussions within committees of which they are members. When a committee is to discuss a project involving a pharmaceutical company with which an individual has a present or has had a previous relationship that could raise the possibility of a COI, this should be openly declared; in these cases, it is the responsibility of the committee to decide whether any additional steps need to be taken.

8.4 Paid employment within universities, institutes, industry, government, and the military, and membership of government committees

Institutions and government generally have clearly developed policies about how to deal with dualities and COI. Most commonly, these involve defined processes for making and assessing declarations of interests and rules for how to re-

spond to them. People employed within these settings and members of such committees should familiarize themselves with these requirements.

In some settings, federal regulations require institutions to appoint a "COI official" to review financial interests in research, a recommendation that has been taken up by many other organizations. Many institutions have now established standing "COI committees," which oversee aspects of research that may raise COI issues and provide information and expertise with respect to applicable laws and regulations. When appropriate, such committees are encouraged to liaise with IRBs and to consider means of involving community or patient representatives in the COI oversight process. COI committee responsibilities may include review of queries by individuals concerning the implications of dualities of interests, documentation of the facts and recommendations, management and oversight of the outcomes of committee deliberations, and communication with relevant institutional officials.

9. Appendix: Abbreviations

COI	Conflicts of interests
FDA	Food and Drug Administration
NIH	National Institutes of Health
IRB	Institutional Review Board