the father's ethnic background, the degree of First Nations genes or potential admixture with white genotypes. Such admixture has occurred in the past, so caution is needed in interpreting ethnicity (unless a detailed family history for at least 2 generations is obtained). Although that was not done for the BC study,[2] only subjects known to be registered under the federal *Indian Act* (1959) and known to be registered with an Indian Band (as they were then known) were considered as First Nations. Although there have been a few instances of a white person marrying a First Nations person and thus becoming registered, the number is minuscule; we are therefore confident that in our sample both parents and probably all 4 grandparents of the babies were of First Nations background. Ethnicity is extremely important in many genetic and congenital anomaly disorders, but unfortunately it has been deemed politically incorrect to obtain this information routinely on vital statistics documents. This loss of data affects not only those who are attempting to do etiologic research but also those who might benefit from such research.

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References

1. Ray JG, Vermeulen MJ, Meier C, Cole DEC, Wyatt PR. Maternal ethnicity and risk of neural tube defects: a population-based study. *CMAJ* 2004;171(4):343-5.
2. Lowry RB, Thunem NY, Silver M. Congenital anomalies in American Indians of British Columbia. *Genet Epidemiol* 1986;3:455-67.

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[One of the authors responds:]

We appreciate Chris Delaney's points about our study of ethnicity and neural tube defects.[1] First, we did not discuss the lower risk of neural tube defects in the group of 10 009 women categorized as "other" because of the nondescript nature of this category. Second, nondifferential misclassification of exposure (in our case, ethnicity) might be expected to bias the results toward the null. Thus, the observed effect size of the associated risk of neural tube defects among women of First Nations descent was probably an underestimation, not the false-positive result that Delaney contends. Third, we have yet to see someone perform an adjustment for multiple comparisons in a single logistic regression analysis conducted on five levels (in our case, ethnicity). By analogy, if we had examined weight as the exposure, divided into quintiles, with the risk of neural tube defects as the outcome, we would not have adjusted for multiple comparisons as Delaney suggests. The reference that Delaney cites does not support this idea either.[2] Given that neural tube defects are becoming so rare in Canada[3] and that data on maternal ethnicity is not typically recorded in large databases, we are unsure if there will be another opportunity in the near future to address the question of ethnicity and risk of neural tube defects with greater statistical power or accuracy.

Fu-Lin Wang and colleagues correctly suggest that some Ontario First Nations women may not undergo maternal serum screening and are thus underrepresented in our study. They are incorrect, however, in stating that "[f]ailure to include all pregnant First Nations women ... in the denominator for a risk calculation ... could lead to overestimation of the risk for neural tube defects." Rather, our risk estimate was calculated as all women within a given ethnic group whose children had neural tube defects and who underwent maternal serum screening (the numerator) divided by all women within the same ethnic group who underwent maternal serum screening (the denominator), which provides a valid prevalence rate ratio for those women. Because Wang and colleagues' Alberta live-birth data on neural tube defects do not capture the 50% or more of affected pregnancies that end in termination, as they admit, they are much more likely to miss a large number of First Nations women who may undergo termination in the presence of a fetal neural tube defect. For now, our "premature" conclusions are based on the some of the best available data in Canada.

We agree with Vinita Dubey that ethnicity may simply be a confounder of neural tube defects, related to poor folic acid intake. Not only might estimating periconceptional use of folic acid tablets within a maternal serum screening program improve future research, but it could also help to focus on which women are not receiving supplements.[4]

Heather Dean and coauthors are right: all women of reproductive age with type 1 or type 2 diabetes mellitus should be taking a daily folic acid supplement if a future pregnancy — planned or unplanned — is possible. Observational data strongly support both this notion and the value of multidisciplinary preconception care among women with diabetes mellitus,[5] no matter where they live in Canada.

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References

1. Ray JG, Vermeulen MJ, Meier C, Cole DEC, Wyatt PR. Maternal ethnicity and risk of neural tube defects: a population-based study. *CMAJ* 2004;171(4):343-5.
2. Aickin M, Gensler H. Adjusting for multiple testing when reporting research results: the Bonferroni vs Holm methods. *Am J Public Health* 1996;86:726-8.
3. Ray JG. Folic acid food fortification in Canada. *Nutr Rev* 2004;62(6 Pt 2):S35-9.
4. Ray JG, Singh G, Burrows RF. Evidence for suboptimal use of periconceptional folic acid supplements globally. *Br J Obstet Gynaecol* 2004; 111:399-408.
5. Ray JG, O'Brien TE, Chan WS. Preconception care and the risk of congenital anomalies in the offspring of women with diabetes mellitus: a meta-analysis. *Q J Med* 2001;94:435-44.

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Does the C in CME stand for "Continuing" or "Commercial"?

The commentaries on commercial sponsorship of continuing medical education (CME) by David Davis[1] and Bernard Marlow[2] contain good recom-

mendations, but both are hampered by an incomplete analysis.

Davis refers positively to the *Code of Marketing Practices* of Rx&D (Canada's Research-Based Pharmaceutical Companies), the brand-name industry association.[3] In discussing industry sponsorship of CME, the code states that "member companies will: support, where possible, the principles and practices of CHE [continuing health education] programs established by practitioner bodies." When it is possible and not possible to do so, the code doesn't say. Complaints, rather than active surveillance, are the means of monitoring compliance with the code.[3] According to reports of the Marketing Practices Review Committee (which appear on the Rx&D Web site, at www.canadapharma.org/Industry_Publications/Code/), most of the complaints come not from doctors but from other companies, which suggests that the code's primary purpose is to level the playing field for companies rather than to enforce any ethical principles.

Marlow is opposed to restrictive actions that might choke off commercial support for high-quality educational offerings and restrict physicians' attendance at these meetings, but at least one recent commentary noted that "damage to the reputation of the profession" is a very serious concern if governing bodies don't provide proper oversight of CME activities.[4] What is the evidence about the effects of company sponsorship on the quality of CME and prescribing behaviour? There is precious little, but the two studies that Marlow cites both show potentially negative outcomes.[5,6]

Both authors cite the landmark analysis by Wanzana,[7] but neither seems to understand the subtitle of that article. The people who run pharmaceutical companies don't give gifts; rather, they make investments, on which they expect a return. In the case of CME, the total "gift" in the United States is in the range of US$700 million annually.[8] Gifts such as direct or indirect financial assistance to attend CME are part of the culture of reciprocity so important in physician–industry relations, and such gifts can create unconscious obligations in physicians that industry knows will be repaid in one way or another.[9]

Let's be clear about industry money and CME. There is a great deal of difference between selling space for booths at medical meetings and direct industry sponsorship in financing CME. The former is equivalent to selling advertising in medical journals, a practice that journal editors vigorously assert does not compromise editorial standards.[10] The latter is more like pharmaceutical companies underwriting journal supplements that are used for their promotional attributes.[11]

If drug companies' primary motivation for contributing to CME is to advance physicians' knowledge, then they should heartily embrace a system whereby they place their money into a blind trust from which independent parties organizing CME events would be able to draw.

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References

1. Davis DA. CME and the pharmaceutical industry: two worlds, three views, four steps [editorial]. *CMAJ* 2004;171(2):149-50.
2. Marlow B. The future sponsorship of CME in Canada: Industry, government, physicians or a blend? [editorial]. *CMAJ* 2004;171(2):150-1.
3. Code of marketing practices. Ottawa: Canada's Research-Based Pharmaceutical Companies; revised 2004 Jan. Available: www.canadapharma.org/Industry_Publications/Code/Code_of_marketing-ENJan2004.pdf (accessed 2004 Nov 16).
4. What's wrong with CME? [editorial]. *CMAJ* 2004;170(6):917.
5. Bowman MA. The impact of drug company funding on the content of continuing medical education. *Mobius* 1986;6:66-9.
6. Bowman MA, Pearle DL. Changes in drug prescribing patterns related to commercial company funding of continuing medical education. *J Contin Educ Health Prof* 1988;8:13-20.
7. Wazana A. Physicians and the pharmaceutical industry. Is a gift ever just a gift? *JAMA* 2000; 283:373-80.
8. Moynihan R. Drug company sponsorship of education could be replaced at a fraction of its cost. *BMJ* 2003;326:1163.
9. Dana J, Loewenstein G. A social science perspective on gifts to physicians from industry. *JAMA* 2003;290:252-5.
10. Morgan PP. Pharmaceutical advertising in med-

ical journals [editorial]. *CMAJ* 1984;130:1412.
11. Bero LA, Galbraith A, Rennie D. The publication of sponsored symposiums in medical journals. *N Engl J Med* 1992;327:1135-40.

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Online access to a for-profit *CMAJ*

Wayne Kondro, quoting CMA Secretary-General Bill Tholl, reports that "Physicians will continue to receive their free subscription to *CMAJ* as a benefit of association membership 'for the foreseeable future'" after CMA Publications is sold to CMA Holdings in January 2004.[1] That's all to the good — but what then of *CMAJ*'s worldwide readers? Will access to *CMAJ* remain free for all online users, despite the shift to for-profit status? I found it strange that this issue was not addressed in Kondro's news article.

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Reference
1. Kondro W. *CMAJ* enters for-profit market. *CMAJ* 2004;171(11):1334.

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[Editor's note]

CMAJ's editors have addressed the topic of open access in this issue's Editorial (see page 149).

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Correction

In part 2 of the series "Tips for learners of evidence-based medicine"[1] the information in Fig. 1 did not fully correspond with the information provided in the text. Specifically, the data for hypothetical trial 2 in Fig. 1B should have been centred at 5% absolute risk reduction, as described in the text; instead, the figure showed trial 2 as being centred at about 6.5% absolute risk reduction. The corrected figure is presented here.

Reference
1. Montori VM, Kleinbart J, Newman TB, Keitz S, Wyer PC, Moyer V, et al. Tips for learners of evidence-based medicine: 2. Measures of precision (confidence intervals). *CMAJ* 2004;171(6):611-5.

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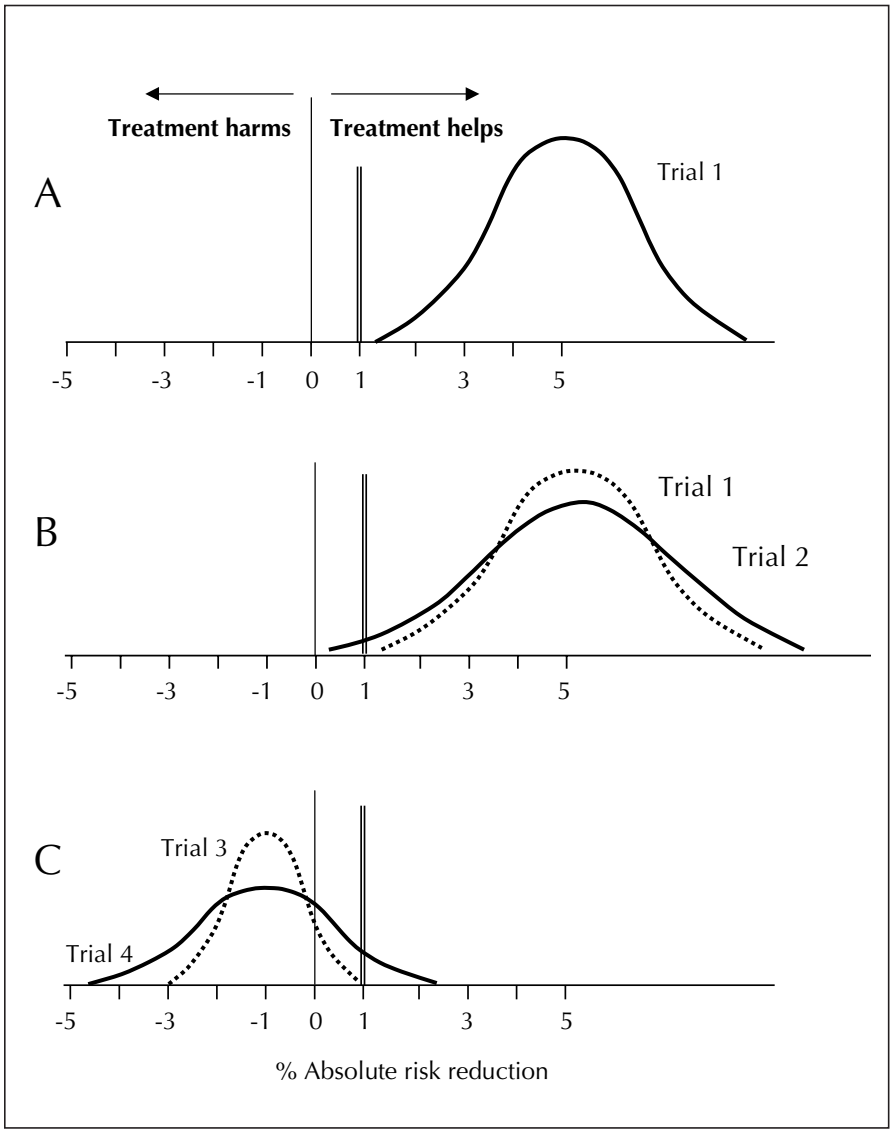

Fig. 1: Results of 4 hypothetical trials. For the medical condition under investigation, an absolute risk reduction of 1% (double vertical rule) is the smallest benefit that patients would consider important enough to warrant undergoing treatment. In each case, the uppermost point of the bell curve is the observed treatment effect (the point estimate), and the tails of the bell curve represent the boundaries of the 95% confidence interval. See the text[1] for further explanation.