

Can Commercial Bias in CME Be Measured?



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Disclosures

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- Owner, Clearview Publishing LLC, ACCME-Accredited CME Provider
- Publisher, *The Carlat Psychiatry Report* and *The Carlat Child Psychiatry Report*
- No pharmaceutical industry funding

Two Types of Instruments

 Checklist of elements

 Counting positive vs. negative statements

Checklist Instruments



The Ontario CME Bias Scale



The Ontario Scale

- 14 items (A-M)
- Each item rated on a Likert scale from 1 to 4.
- Each item is a statement requiring a judgment.

Takhar J et al., 2007. Developing an instrument to measure bias in CME. *Journal of Continuing Education in the Health Professions* 27(2):118-123.

The Ontario Scale-Results

- Survey used to judge 17 live CME courses
- Good internal consistency (Cronbach's alpha 0.82)

The Ontario Scale-Results

- “Approved” courses: mean 21
- “Requiring modification” courses: mean 30.1
- The higher the score, the more the bias

The Ontario Scale-Usefulness

- “...intends to flag CME that should be subject to a more detailed review prior to approval.”

The CACME Risk Stratification Tool



The CACME Instrument

- Consortium for Academic Continuing Medical Education
- 12-question survey
- Experts applied the tool to standardized “cases”

Barnes B et al., 2007. A Risk Stratification Tool to Assess Commercial Influences on Continuing Medical Education. *Journal of Continuing Education in the Health Professions* 27(4):234-240.

The CACME Instrument-- Results

- Good inter-rater reliability
- Experts found it useful in identifying courses at risk for commercial bias

Counting Instruments



The Marjorie Bowman Technique



Bowman, M. A. 1986. The impact of drug company funding on the content of continuing medical education. *Journal of Continuing Education in the Health Professions* 6(1):66-69.

The Marjorie Bowman Technique

- Note each mention of a product
- Score as positive, negative, or equivocal
- If two drugs are essentially equal, unbiased courses would describe them similarly

Bowman, M. A. 1986. The impact of drug company funding on the content of continuing medical education. *Journal of Continuing Education in the Health Professions* 6(1):66-69.

Methodology

- Two industry-supported CME courses on Calcium Channel Blockers
- Two different company sponsors, essentially identical drugs

Bowman, M. A. 1986. The impact of drug company funding on the content of continuing medical education. *Journal of Continuing Education in the Health Professions* 6(1):66-69.

Results

- Sponsored drug had more positive claims
- When two drugs were compared, sponsored drug was usually said to be “better.”

Bowman, M. A. 1986. The impact of drug company funding on the content of continuing medical education. *Journal of Continuing Education in the Health Professions* 6(1):66-69.

Commercial Bias Inventory (CBI)



Carlat D et al. 2006. A New Measure of Industry Bias in Psychiatry: The Commercial Bias Inventory. Presentation, APA Meeting May 2006.

The CBI: Favorable vs. Unfavorable Statements

- *Favorable statement* describes a clinical benefit of the product
- *Unfavorable statement* describes a clinical disadvantage of the product

Methodology of Pilot Study

- All industry-funded CME articles received in private practice office Aug 2005-May 2006 were collected
- 15 articles were randomly selected for coding

Methodology of Pilot Study

- All data providing clues to sponsorship expunged
- Commercial Bias Inventory used to blindly rate each article for presence of commercial bias

Favorable Statements: Sponsored versus Competitors

	Sponsored Medication	Competing Medications	Pro-Sponsor Bias (Ratio)
Number of Favorable Statements (average)	13	2.2	6

Probability that companies say good things about their medications

- Percent of articles in which sponsored medication received the most favorable statements:

$$13/15 = 86\%$$

Probability that companies say *bad* things about their medications

- Percent of articles in which sponsored medications received the most unfavorable statements:

$$0/15 = 0\%$$

Accurately Guessing Identity of Sponsored Medication

- Percent of articles in which blinded rater accurately guessed the identity of the sponsored medication:

$$14/15 = 93\%$$

Conclusion: Which Instrument(s) to Use?

- Toronto: Comprehensive, but requires clinical expertise
- CACME Risk Stratification: Easy to use, but overly focused on the paper trail
- Bowman Technique/Carlat CBI: Probably most valid, but extremely hard to use