

## **ANZCA and pharmaceutical industry sponsorship: time to break the link?**

In September 2017, ANZCA released its first partnerships and sponsorship policy.(1) This important document guides decisions around individual or commercial sponsorship of continuing medical education activities (CME), research grants and other resources to support the operation of the college and the Faculty of Pain Medicine. We believe that it is time to revise the policy, to specifically exclude pharmaceutical industry sponsorship of college activities.

While the policy provides guiding principles for these partnership agreements, to view them as unrestricted philanthropic donations is to fail to recognise the vested interest the pharmaceutical industry has in being associated with, and by implication approved by, ANZCA and similar peak medical bodies.

The ANZCA publication “Supporting Anaesthetists’ Professionalism and Performance: A Guide for Clinicians” states that one of the roles of our profession, as leaders and managers, is to “promote efficiency and cost effectiveness – balancing safety, effectiveness, efficiency and just allocation of resources in choosing anaesthetic techniques, making equipment and drugs available in multiple locations and providing anaesthetic services in the broader healthcare environment”.(2) We are encouraged to do this by “examining evidence to assess value for money, potential harm and side effects of anaesthesia and demonstrating awareness of the cost implications of prescribing.”(2) It is difficult to reconcile the objectivity required for this task with the acceptance of financial subsidy from the very industry whose products we are supposed to evaluate.

Accurate estimates of pharmaceutical industry marketing expenditure are difficult to ascertain. Nevertheless, attempts to quantify this expenditure have been made. In 2004, pharmaceutical industry spending on marketing in the US was \$US57.5 billion, almost twice as much as the \$US31.5 billion spent on research and development.(3) Not surprisingly, prioritising marketing over research and development stifles innovation.(4) In another study, marketing expenditure in the US in 2016 was estimated at \$US29.9 billion, of which \$US20.3 billion was targeted towards health professionals.(5) This is a huge investment by the pharmaceutical industry. It has been estimated that fewer than one in 10 new drugs offers a significant therapeutic benefit over what is already available (6, 7); yet over 90 per cent of marketing expenditure promotes these new low value drugs.(8)

In Australia, over a four-year period between 2011 and 2015, the pharmaceutical industry contributed \$A286 million to CME events for the medical profession, from journal clubs to meeting sponsorship and payments to attend overseas conferences.(9)

Industry support for CME is in fact only one aspect of a multifaceted marketing strategy. Current avenues of pharmaceutical company support to ANZCA include:

- Sponsorship of the annual scientific meeting (ASM) (“major sponsors” contribute \$52,000)(10)
- The ANZCA Foundation’s major research grant (\$50,000, with naming rights)(11)

- The Faculty of Pain Medicine Better Pain Management program (12)
- Support for the printing of the fourth edition of the *Acute Pain Management: Scientific Evidence*.(13) (The college has not clarified whether this will continue with the fifth edition).

A financial association between the pharmaceutical industry and treatment guidelines is particularly problematic because this has the potential to affect medical practice more widely. While this may seem self-evident, it is a concern that has been raised in a recent cross-sectional study of Australian guidelines.(14) Twenty-three of 33 guidelines reviewed included at least one author with a potentially relevant undisclosed financial conflict of interest, despite the National Health and Medical Research Council (NHMRC) recommendations which strongly and unequivocally advise the exclusion of authors with financial conflicts of interest.(15) As the *Acute Pain Management: Scientific Evidence* document is widely perceived to be a guideline by the medical community (16), the appropriateness of pharmaceutical industry funding for it is highly questionable.

As doctors, we consistently underestimate our own susceptibility to pharmaceutical marketing in its various forms, but simultaneously suspect that our peers are more likely to be influenced than ourselves.(17-21) Social science experiments demonstrate that such self-serving bias is unintentional and unconscious, and as such is difficult to correct for even when we are motivated to do so.(22)

This lack of insight is exploited by the pharmaceutical industry in the form of gift-giving. Even a small gift can be a powerful tool, as the intended target's defences are down.(23, 24) In the US, due to the Physician Payments Sunshine Act from 2009, it is now possible to track industry payments greater than \$10 to individual physicians through the Open Payment Data.(25, 26) This has facilitated research to investigate the association between the number and value of industry payments to doctors and their prescribing practices.(27-29) These studies consistently report a correlation between the number and value of payments to doctors and their propensity to prescribe more expensive and branded medications.(27-30) Even the receipt of a low value gift, such as a meal of \$US20, has been found to be associated with higher relative prescribing rates of the promoted product.(28)

It has been argued that these interactions do not result in negative patient outcomes.(31) It is true that it is difficult to directly attribute negative patient outcomes to pharmaceutical industry marketing practices. Nevertheless, the current opioid crisis in the US provides some interesting data for consideration. In a population-based county-level analysis of opioid marketing payments and opioid overdose mortality, there was an association between marketing expenditure, opioid prescribing and mortality rates.(32) Marketing expenditure data was obtained from the Open Payments database and included payments that would be categorised as CME sponsorship (meals and travel expenses, speaker's fees and honoraria, educational costs).(32) In a highly publicised civil lawsuit in August 2019, the Janssen pharmaceutical company of Johnson and Johnson was fined \$US572 million by the state of Oklahoma for its role in the opioid crisis.(33) Purdue Pharma, meanwhile, has filed for bankruptcy as part of a process to address the overwhelming number of class actions it now faces in the US over its part in the epidemic.(34)

Finally, and importantly, a narrow interpretation of individual patient outcomes neglects the opportunity cost incurred to the rest of the health system due to disproportionate spending on newer, more expensive treatments with marginal, if any, added benefit.

Advocates of industry-sponsored CME assert that it provides a valuable resource to help doctors keep up with the “accelerating pace of biomedical progress”(35), that the pharmaceutical industry allows for provision of experts in the field to provide CME, and that this is ultimately beneficial for patients.(31, 35, 36) While the importance of CME is undeniable, the case for its provision to be sponsored by pharmaceutical companies is weak. CME is a mandated part of the college’s continuing professional development (CPD) requirements. We are well-remunerated professionals who can afford unsubsidised CME activities.

It is unclear to what extent ANZCA relies on these partnerships for its activities. If the amount is minimal in the context of the overall budget, we would argue that accepting pharmaceutical industry sponsorship for professional activities is an unnecessary compromise which we can easily forego. Conversely, if we are significantly dependent on these sponsorships, this raises questions about power imbalance and vested interests and makes the need for severing these compromising ties even greater. It would be interesting to know what increase in fellows’ annual fees would be necessary to cover the loss of all pharmaceutical financial support.

In 2019, the *British Medical Journal* launched a powerful global campaign to separate healthcare from commercial interests, particularly the influence of pharmaceutical companies.(37) One of the authors’ key messages is that “widespread financial dependence on industry brings commercial bias in research evidence, medical education and clinical practice”.(37) ANZCA has a proud history of leadership in healthcare, in measures affecting patient safety and patient advocacy. By severing sponsorship ties with pharmaceutical companies, our college would continue that leadership role.

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## References

1. ANZCA. Partnerships and Sponsorships Policy 2017 [Available from: <http://www.anzca.edu.au/documents/fa-anzca-partnership-and-sponsorship-policy-201710.pdf>].
2. ANZCA. Supporting Anaesthetists’ Professionalism and Performance: A Guide for Clinicians. Melbourne: ANZCA; 2017. Available from: <http://www.anzca.edu.au/documents/supporting-anaesthetists-professionalism-and-perfo.pdf>.
3. Gagnon M-A, Lexchin J. The cost of pushing pills: a new estimate of pharmaceutical promotion expenditures in the United States. *Plos medicine*. 2008;5(1):e1.

4. Arnold DG, Troyer JL. Does increased spending on pharmaceutical marketing inhibit pioneering innovation? *Journal of health politics, policy and law*. 2016;41(2):157-79.
5. Schwartz L, Woloshin S. Medical Marketing in the United States, 1997-2016. *JAMA: The Journal of the American Medical Association*. 2019;321(1):80-undefined.
6. Light DW, Lexchin JR. Pharmaceutical research and development: what do we get for all that money? *Bmj*. 2012;345:e4348.
7. Van Luijn JC, Gribnau FW, Leufkens HG. Superior efficacy of new medicines? *European journal of clinical pharmacology*. 2010;66(5):445-8.
8. Lexchin J. The relation between promotional spending on drugs and their therapeutic gain: a cohort analysis. *CMAJ open*. 2017;5(3):E724.
9. Fabbri A, Grundy Q, Mintzes B, Swandari S, Moynihan R, Walkom E, et al. A cross-sectional analysis of pharmaceutical industry-funded events for health professionals in Australia. *BMJ open*. 2017;7(6):e016701.
10. ANZCA. Sponsorship and exhibition form. Available from: <https://asm.anzca.edu.au/wp-content/uploads/ANZCA-ASM-2020-booking-form.pdf>
11. ANZCA. Corporate support. Available from: <http://www.anzca.edu.au/research/foundation/corporate-support>
12. Faculty of Pain Medicine A. Better Pain Management. Available from: <http://fpm.anzca.edu.au/resources/better-pain-management>
13. Schug SA PG, Scott DA, Halliwell R, Trinca J; APM:SE Working Group of the Australian, Medicine Australia and New Zealand College and Faculty of Pain Medicine. *Acute Pain Management: Scientific Evidence (4th edition)*. Melbourne: ANZCA & FPM; 2015.
14. Moynihan R, Lai A, Jarvis H, Duggan G, Goodrick S, Beller E, et al. Undisclosed financial ties between guideline writers and pharmaceutical companies: a cross-sectional study across 10 disease categories. *BMJ Open*. 2019;9(2):e025864.
15. NHMRC. Guidelines for Guidelines - Identifying and managing conflicts of interest [updated 22/11/2018. Available from: <https://www.nhmrc.gov.au/guidelinesforguidelines/plan/identifying-and-managing-conflicts-interest>.
16. Schug SA, Palmer GM, Scott DA, Halliwell R, Trinca J. *Acute pain management: scientific evidence, 2015*. *Medical Journal of Australia*. 2016;204(8):315-7.
17. Fickweiler F, Fickweiler W, Urbach E. Interactions between physicians and the pharmaceutical industry generally and sales representatives specifically and their association with physicians' attitudes and prescribing habits: a systematic review. *BMJ open*. 2017;7(9):e016408.
18. Halperin EC, Hutchison P, Barrier Jr RC. A population-based study of the prevalence and influence of gifts to radiation oncologists from pharmaceutical companies and medical equipment manufacturers. *International Journal of Radiation Oncology Biology Physics*. 2004;59(5):1477-83.
19. Lieb K, Scheurich A. Contact between Doctors and the Pharmaceutical Industry, Their Perceptions, and the Effects on Prescribing Habits. *PLoS ONE*. 2014;9.
20. Orłowski JP, Wateska L. The effects of pharmaceutical firm enticements on physician prescribing patterns: there's no such thing as a free lunch. *Chest*. 1992;102(1):270-3.
21. Wazana A. Physicians and the pharmaceutical industry: is a gift ever just a gift? *Jama*. 2000;283(3):373-80.
22. Dana J, Loewenstein G. A Social Science Perspective on Gifts to Physicians From Industry. *JAMA*. 2003;290(2):252-5.

23. Katz D, Caplan AL, Merz JF. All gifts large and small: toward an understanding of the ethics of pharmaceutical industry gift-giving. *The American Journal Of Bioethics: AJOB*. 2010;10(10):11-7.
24. Oldani MJ. Thick prescriptions: toward an interpretation of pharmaceutical sales practices. *Medical anthropology quarterly*. 2004;18(3):325-56.
25. Open Payments Data USA: Centers for Medicare and Medicaid Services (CMS); <https://openpaymentsdata.cms.gov/>
26. Library of Congress 2009. "S.301 - Physician Payments Sunshine Act of 2009 - 111th Congress (2009-2010)". Available from: <https://www.congress.gov/bill/111th-congress/senate-bill/301>
27. Brunt CS. Physician characteristics, industry transfers, and pharmaceutical prescribing: Empirical evidence from medicare and the physician payment sunshine act.. *Health Services Research*. 2019;54(3):636.
28. DeJong C, Aguilar T, Tseng C-W, Lin G, Boscardin WJ, Dudley RA. Pharmaceutical Industry–Sponsored Meals and Physician Prescribing Patterns for Medicare Beneficiaries. *JAMA Internal Medicine*. 2016;176(8):1114-undefined.
29. Perlis RH, Perlis CS, Lexchin J. Physician Payments from Industry Are Associated with Greater Medicare Part D Prescribing Costs. *PLoS ONE*. 2016;11(5).
30. Hadland SE, Cerdá M, Li Y, Krieger MS, Marshall BD. Association of pharmaceutical industry marketing of opioid products to physicians with subsequent opioid prescribing. *JAMA internal medicine*. 2018;178(6):861-3.
31. Barton D, Stossel T, Stell L. After 20 years, industry critics bury skeptics, despite empirical vacuum.(Report). *International Journal of Clinical Practice*. 2014;68(6):666.
32. Hadland SE, Rivera-Aguirre A, Marshall BDL, Cerdá M. Association of Pharmaceutical Industry Marketing of Opioid Products With Mortality From Opioid-Related Overdoses, *JAMA Network Open*. 2019;2(1):e186007-e.
33. Hoffman J. Johnson & Johnson Ordered to Pay \$572 Million in Landmark Opioid Trial. *The New York Times*. 2019 August 26.
34. Kowelle J. OxyContin maker Purdue Pharma files for bankruptcy. *The Guardian*. 2019 16 September.
35. Holmer AF. Industry Strongly Supports Continuing Medical Education. *JAMA*. 2001;285(15):2012-4.
36. Rubin PH. Altruism and Self Interest in Medical Decision Making. *The Journal of Law, Medicine & Ethics*. 2009;37(3):401-9.
37. Moynihan R, Bero L, Hill S, Johansson M, Lexchin J, Macdonald H, et al. Pathways to independence: towards producing and using trustworthy evidence. *BMJ*. 2019;367:l6576.