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The sunshine act and medical publications: Guidance from professional medical associations

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Abstract

Objective. To review guidance from professional medical associations to physicians on the Sunshine Act, with a focus on industry support for medical publications. **Methods.** Using 'Sunshine Act' as a search term, we searched PubMed (dates February 2013 to November 2014) and the 'grey literature' using Google and Google Scholar. Online information was extracted from websites of pre-identified professional medical associations. **Results.** Some professional medical associations have published peer-reviewed recommendations, position statements or general advice on their websites and in journals around the Sunshine Act. Associations also provided broad online educational resources for physicians. There was universal agreement between peer-reviewed publications, including guidelines, for the need for full transparency and disclosure of industry support. Surveys by some professional associations showed variance in opinion on the forecasted impact of the Sunshine Act on physician-industry relationships. There was scarce information specifically related to reporting requirements for industry-supported medical publications. **Conclusions.** There is a shortage of information for physicians from professional associations regarding the Sunshine Act and support for medical publications. Due to the lack of clear guidance regarding support for publications, there are presently varying interpretations of the Sunshine Act. The literature debates the potential impact of the Sunshine Act and expresses some concerns that physician-enabled innovation in drug development may be hindered.

Keywords:

Sunshine Act, professional associations, transparency

History

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Introduction

The relationships between the pharmaceutical industry (industry) and healthcare professionals (HCPs) are valuable not only for drug development and the medical publication process, but also for eventual improvements in patient care (Table 1). In many cases, these relationships include financial transactions between HCPs and industry, which are under intense scrutiny. The potential to influence physician prescribing patterns and other ethical considerations have led to demands for increased transparency around these financial relationships [1].

Part of the Patient Protection and Affordable Care Act (PPACA), the US Sunshine Act (the Act) is a landmark federal-level mandate to disclose certain financial relationships between industry and US physicians holding a current license to practice (covered recipients [CR]). The Centers for Medicare and Medicaid Services (CMS) Final Rules for Implementation (the Rules), which were published in February 2013 [2], defined CR as US physicians holding a current license to practice, and teaching hospitals. Employees

of sponsoring companies who met the definition of CR were excluded [2]. The relationships cited in the Act include both direct and indirect payments and "transfers of value" (TOV), and cover such in-kind benefits as meals, travel expenses and/or educational materials in connection with medically relevant interactions. This information is made publicly available in the US CMS Open Payments database [2]. The Act has evoked a range of reactions, including concerns regarding the accuracy of the published data, potential subsequent misinterpretations of these data and potential downstream effects on innovative drug development [3].

Industry often provides nonmonetary assistance to authors to assist with the development of medical publications (including peer-reviewed journal articles and reviews, congress abstracts and oral and poster presentations). The support often is in the form of medical writing, copyediting and creating artwork for the publications, under the direction of the authors. The support provided is made transparent in the disclosures that accompany manuscripts upon journal submission, and is often included in the final publication. By

Table 1. Industry–healthcare provider relationships.

Relationship	Description	General guidance to avoid bias
Industry-sponsored research	A key source of innovation Research payments are often complex and often administered through institutions	Professional associations reiterate that potential or actual conflicts of interest may exist and provide detailed guidance on how to provide disclosure
Peer-reviewed communications (written and oral)	Industry depends on medical experts to speak and write about therapeutic areas and products. Resulting peer-reviewed publications are a major source of physician education	Peer-reviewed communications are well defined by professional associations. Associations outline criteria for partnerships in considerable detail. Guidance reiterates that partnerships should not be motivated by any inappropriate conflicts of interest
Advisory boards, speaking engagements, and lectures	Consulting and speaking engagements including advisory boards and lectures	Many companies have developed an internal compliance process for reporting any TOV as a result of the Act. Associations provide guidance on disclosure of consulting agreements
Education	CME events are a major source of education for HCPs. Reporting exemptions for CME have been maintained by CMS at the time of writing. Nevertheless, stringent rules are in place regarding industry support	Physician associations have reiterated that speakers will provide disclosures of financial relationships during presentations The content must be under author control
Educational grants and trainee scholarships	HCP educational assistance to further expertise and benefit patients	Physician associations have encouraged management of industry funding, as opposed to limiting support
Gifts and free meals	Gifts and meals constitute a large proportion of the 2014 data release	Many professional associations have alerted their membership that these will be reported by industry. Physicians have expressed offense that these interactions are considered as possibly affecting prescribing patterns

Abbreviations: CME = Continuing medical education; HCP= Healthcare professional; TOV = Transfer of value.

adhering to ICMJE guidelines, regardless of the study sponsorship or support provided, the authors are able to review the data, provide input into interpretation of the results and provide final approval of the submitted version. Since most medical journals follow the ICMJE criteria for authorship, medical writers can qualify for authorship as long as they fulfill the ICMJE criteria [4].

Although the rules mention support for medical publications related to research, it is unclear under the Rules how and to what extent the TOV reporting obligation should be applied [2]. In our review of the Rules, we found three mentions that could potentially be related to publications [2]. The first states that, “Payments for medical research writing and/or publication would be included in the research payment, if the activity was included in the written agreement or research protocol and paid as part of the research contract.” The second speaks to ghostwriting, which is prohibited by the good publication practices that are followed by the industry [5]. The third addresses journal reprints, which is not relevant to author support for the development of publications. The query “medical writing support placed by the authors to the CMS open payments website produced a single FAQ response (FAQ8159) confirming that “medical research writing/publication” could be included as part of research agreement [2].

Regarding company interpretation, many suggest that publication support should be reported as a TOV, while others suggest that the Rules are written too broadly to provide the required clarity [6]. Without clear guidance, companies have taken varied approaches, many regarding it as a TOV but with different interpretations of the specific reporting requirements [3,6].

Physicians often turn to their professional associations for guidance, not only for answers to clinical questions, but also

for matters related to ethical and business-practice issues. This literature review covers the time period from 1 February 2013 (the date that CMS announced the release of the Rules) to 6 November 2014. It was undertaken to better understand how much and what type of information has been provided by professional associations regarding authorship and industry support, and whether the information was consistent with other interpretations of the Rules.

Materials and methods

Peer-reviewed and “grey” literature

Using “Sunshine Act” as a search term, we reviewed peer-reviewed publications indexed in PubMed from 1 February 2013 (month of issue of the Rules) to 6 November 2014. The “grey literature”, defined as articles, in print or electronic form, not published in easily accessible journals and which may not be indexed in formal academic databases, was surveyed using the Google search engine and the Google Scholar database, applying the same search term. Publications were manually identified and confirmed from the predefined search strategy and downloaded for detailed review. Three medical publication professionals with independent affiliations screened the publications list resulting from the searches. Publications were reviewed in detail and classified using the following six pre-specified criteria to confirm eligibility/inclusion and to aid data extraction: industry-supported/sponsored publications, industry-author relationships, industry-investigator relationships, guidance and/or recommendations related to industry HCP relationships, ethical considerations around the Act, and industry-sponsored research. Classifications were not mutually exclusive. Publications not fitting into the six inclusion/research criteria detailed above were excluded.

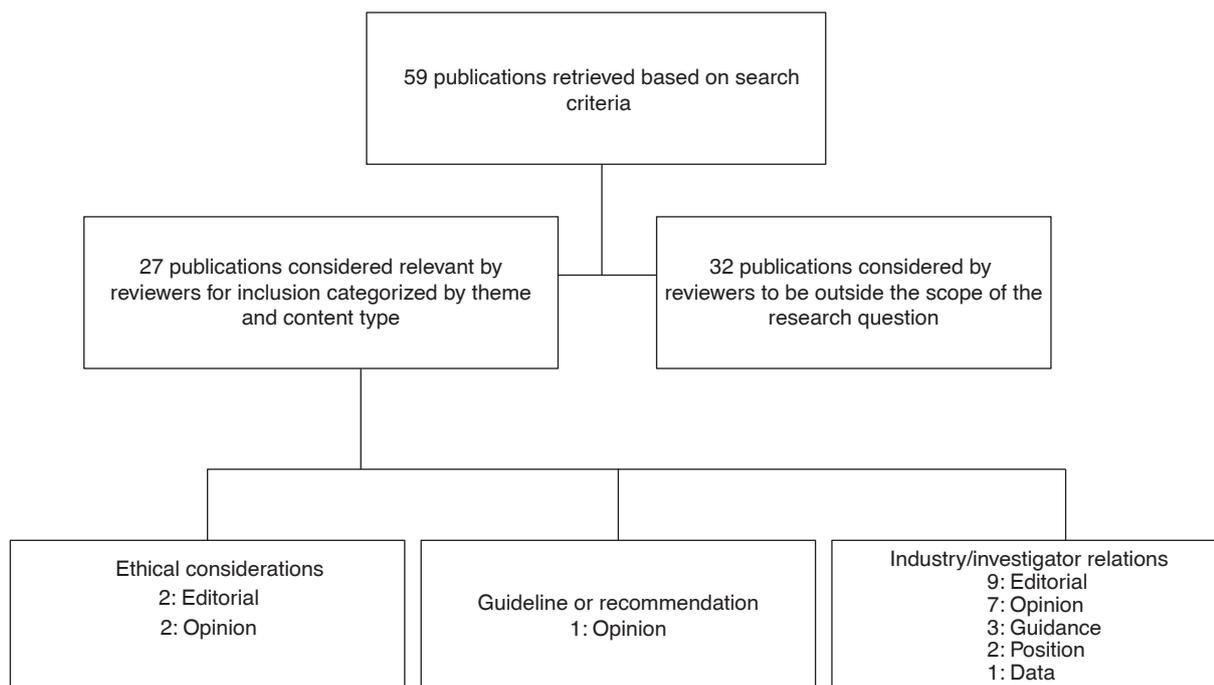


Figure 1. Disposition of publications retrieved for review.

Once it was determined that a publication met at least one of the pre-specified criteria, data collected included publication type (whether peer reviewed, grey, industry, or academic), year, content type, theme and a structured summary of three salient findings/conclusions per publication.

Professional medical association websites

Websites of 11 pre-identified professional medical associations were manually searched and data extracted for publicly available information or statements regarding the Act, following the above data extraction criteria. The aim of the manual selection of professional associations was to obtain a sufficiently diverse sample (based on membership number, size and type, i.e. general medicine and specialty associations) to be representative of professional medical associations in the US.

Data extraction and analysis

Data from the literature searches were consolidated into a fact sheet/repository housed centrally at the International Society for Medical Publication Professionals (ISMPP). Articles were subsequently reviewed in-depth and key points were summarized; all discrepancies were resolved by agreement. Additional articles identified ad hoc during the review process were added to the repository.

Results

A total of 59 articles were reviewed, 28 of which were initially considered relevant (Figure 1). However, upon further review, we did not include the publication of PPACA in our analysis. The three themes into which the articles fell

were ethics, guidelines/recommendations and industry/investigator relations. In cases of more than one theme represented in an article, the authors elected to assign the theme that covered the majority of content (Supplementary table).

Information from professional association publications and websites

Published information and position statements from professional associations focused on clarifying the reporting requirements to their readership in the affiliated peer-reviewed journals [7-9]. Results from our website searches are summarized in Table 2. Many HCP-specific association websites provide general information on the Act and/or Toolkits, FAQs and computer-based apps to track their data. The American Medical Association (AMA) posted a position statement advocating that transparency reporting should: not impose a "burden on physician's; "protect physician rights and provide "meaningful, accurate data [10]. With respect to specialist medical associations, the American Society for Clinical Oncology (ASCO) and the American Academy of Dermatology (AAD) provide practical information and resources related to the Act. In addition, the National Comprehensive Cancer Network (NCCN) recommends various resources available on the CMS website, such as tutorial videos, fact sheets and a live help desk [11]. Although the literature from professional associations contained broad guidance, there was insufficient consistence or consensus from associations around specific concerns, including TOVs for research grants, trial participation and medical publications.

Of note is that ASCO updated its conflict of interest (COI) policy to promote transparency and independence in the development of scientific publications [8]. The 2013 ASCO

Professional association/URL/No. of members	Resources	Information specific to medical publications
American Medical Association (AMA) http://www.ama-assn.org Accessed on 7 May 2015 ~225,000	Webinar: Preparing for the Sunshine Act Sunshine Act FAQs Sunshine Act brochure Speech by Jeremy A. Lazarus, President of AMA on 15 June 2013	None
American Association of Family Practice (AAFP) http://www.aafp.org Accessed on 7 May 2015 ~115,900	General information on the Sunshine Act with ongoing updates	None
American Osteopathic Association (AOA) http://www.osteopathic.org Accessed on 7 May 2015 ~110,000	Summary of the Sunshine Act Final Rule: 15 February 2013 General description of the Sunshine Act and AOA position	None
American College of Physicians (ACP) http://www.acponline.org Accessed on 7 May 2015 ~141,000	Are You Ready for the National Physician Payment Transparency Program? General information on the Sunshine Act Mobile app to track TOV	None
American Association of Clinical Endocrinologists (AAACE) https://www.aace.com Accessed on 7 May 2015 ~6500	General Resources for Physician Payment Sunshine Act	None
American College of Rheumatology (ACR) http://www.rheumatology.org Accessed on 7 May 2015 ~9400	General Resources for Physician Payment Sunshine Act Sunshine Act "toolkit"	None
American Heart Association (AHA) http://www.heart.org Accessed on 7 May 2015 ~32,000	Limited general information on the Sunshine Act	None
American Society of Hematology (ASH) http://www.hematology.org Accessed on 7 May 2015 ~15,000	Resources for physicians and ongoing updates Statement from ASH President Linda J Burns, MD, on release of Sunshine Act Data; published 30 September 2014	President's letter reinforces the criticality of industry-physician relationships
American Society of Clinical Oncology (ASCO) http://www.asco.org Accessed on 7 May 2015 ~35,000	Dedicated page on Physician Payment Sunshine Act	Brief information on TOV reporting for text books, journal reprints, and manuscripts
American Academy of Dermatology (AAD) https://www.aad.org Accessed on 7 May 2015 ~17,000	General information on the Sunshine Act	None
American Academy of Pediatrics (AAP) https://www.aap.org Accessed on 7 May 2015 ~62,000	Toolkit for Physician Financial Transparency Reports Mobile app for physicians CMS Open Payments FAQs	None

Abbreviations: CMS = Centers for Medicare and Medicaid Services; FAQs = Frequently asked questions; TOV = Transfer of value.

policy had originally included restrictions on the first, last and corresponding author of abstracts and papers that reported industry-funded original research, or who were company employees, investors or paid speakers. ASCO later altered this policy, and in 2014 published the amendment to its 2013 authorship policy based on feedback that it was too restrictive, and temporarily removed the author restrictions for a period of at least 3 years [12]. ASCO plans to collect and monitor the disclosures from the first 2 years of the amendment (i.e. 2014-2016) and in year 3 will examine the data to decide on next steps [8].

The sunshine act and medical publications

Several published papers and guidelines note that payments to authors should be disclosed [7,8,13-22]. However, the Rules contain no clear direction on how to report industry support of authors, which is notably different from direct payment. Simcoe et al. noted that a lack of clear guidance exists, even when such guidance is formally sought [14].

Information from ISMPP, including surveys and meetings with pharmaceutical companies, demonstrates varying interpretation of the Rules with respect to reporting support for medical publications as a TOV. Surveys of ASCO members show variance in opinions among different membership cohorts as to the value and necessity of reporting TOVs [19]. Other authors question whether writing assistance should be disclosed or whether the information, once disclosed, will be helpful to journal editors [3,23]. Among publications that appeared after 1 February 2013, that mentioned the Act and authors, most lacked specific advice or opinions. Publications that do present opinions or advice suggest that the understanding of TOV by authors is generally poor in the medical community [6,8,13-16,18-21]. For example, in recent published surveys, many respondents disagree regarding the value of reporting TOV [19]. Additionally, the editors of the Journal of Clinical Psychopharmacology go so far as to suggest that in many cases writing assistance creates a qualification for authorship, removing it from the category of TOV altogether [24].

Discussion

Articles published between 1 February 2013 and 6 November 2014, contain only sparse information by professional associations regarding how to interpret the Rules in relation to industry-funded support for medical publications. Most of the information recapitulates the Rules and highlights the steps that covered recipients should take to prepare themselves and to check their data (Table 2). Of the 11 association sites reviewed, 9 failed to provide information on the Act in relation to publications. Also addressed were industry-sponsored research, a precursor to publication of results, and the importance of balancing industry – HCP relationships [25-27]. Interestingly, some reports highlighted possible unintended “reverse-direction” adverse consequences, such as biases that may be introduced in trying to overcompensate to avoid perception of bias [7]. The most frequent ethical concerns mentioned were COIs and inappropriate influence regarding HCPs’ prescribing of drugs and/or use of devices manufactured by companies with whom they have financial relationships, as well as the importance of transparency in those relationships [26,28,29].

Most authors of the reviewed publications suggest that transparency in industry–HCP financial relationships is important. However, of major concern is the potential for unintended negative perceptions of the reported data. Examples include equating the data with bias simply because physicians appear in the Open Payments database, and the assumption that research payments attributed to a single physician (lead investigator), which may be substantial, were actually received by that individual rather than the institution where the research was conducted [3,30,31]. Detailed context for all payments and TOVs would clarify these issues.

There is also the potential for a “chilling effect” on the participation of investigators in industry research and the subsequent publication of results. Some investigators may potentially decline to participate to avoid the perception of payment for authorship [3,6]. If authors decline the offer of publication support, there may be a negative effect on manuscript development timelines, which may in turn affect industry’s ethical obligations to publish clinical trial results in a timely manner. Due to time constraints of busy practicing clinicians, manuscripts may likely take longer to be written [6]. In some cases, investigators may not possess the skills required to produce journal-ready manuscripts, which may also cause delays [24]. As Citrome observes, a mandate to report writing assistance as a TOV may adversely impact the participation of academic colleagues in the publication of industry-sponsored research; however, in the absence of either clear guidance or reporting experience, such concerns remain theoretical [6].

Equally concerning may be the potential for the loss of critical review and input provided through industry–HCP partnerships [26]. Although many companies have qualified physicians who can author clinical publications, they are usually not practicing clinicians. Thus, the clinical practice interpretation and real-world application of the data may be lost if practicing HCPs decline to participate. Finally, other

HCPs may decide to not participate in industry-sponsored research at any level, which may impede continued advances in healthcare [30].

Of importance to all professionals affected by the Act, including the authors, is how the Open Payments data are reported, interpreted and perceived by both the medical community and the public [6]. Another viewpoint questions the meaning of all financial disclosures given the inconsistency and incompleteness of existing databases as well as the possibility that the public may misinterpret the significance of reported payments [32]. These publications remark on the complexity of the data reported and the difficulty of drawing meaningful conclusions from so many disconnected data points, even for those with expertise in managing clinical datasets. It has also been noted that key opinion leaders (KOLs) may be overrepresented in the clinical literature relative to other experts regardless of their financial relationships, which limits the value of disclosures under the Act [1,15,16,28]. Further clarifications and recommendations are needed.

There are several limitations to our study that are important when considering our findings. Since many of the results are from professional associations with documented publication policies, they may not be generalizable to all associations. As well, because of our pre-selection of association websites, we may well have missed some that do include specific information on our research topic. In addition, since the Act is relatively new, the shortage of guidance from professional associations may simply be due to the expectation that there may be future amendments/changes to the Act.

Conclusion

Industry-funded research and publication of results is a critical component in the education of practitioners and in advancing patient care [25]. The lack of clear direction in the Rules has led to varied interpretations regarding reporting of industry-provided publication support as a TOV [33]. The Rules may need additional detail, specificity and guidance around subcategories of reporting for publication support that would constitute a TOV. In our opinion, without appropriate context, companies that report TOV for publication assistance may be erroneously perceived as paying authors for authorship rather than purely providing funding to support writing assistance, and companies that do not report may be perceived as lacking transparency.

What appears to be missing in the published literature regarding industry-funded publication support is an expert interpretation of the Final Rules or, ideally, more definitive guidance from CMS. Without this, the process of assigning a monetary value to publication support may continue to vary across companies. One consequence may be confusion among authors, particularly those working with several different companies, and the risk of disputed Open Payments records. Education among all stakeholders is key to ensure that the relationships between industry and CR, and the data reported in Open Payments, are placed in proper context [34].

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Disclaimer

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Declaration of interest

D Toroser is an employee of Amgen Inc. K Pepitone is a contracted consultant for Cactus Communications. A Cairns is an employee of Ashfield Healthcare Communications. R Juneja is an employee of MedImmune. A Georgieva is an employee of Excerpta Medica BV. A Weigel is an employee of ISMPP. The authors have no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed.

References

- [1] Mackey TK, Liang BA. Physician payment disclosure under health care reform: will the sun shine? *J Am Board Fam Med* 2013;26:327–31.
- [2] Centers for Medicare and Medicaid Services. Official website for Open Payments (the Sunshine Act). 2014. Available from <http://www.cms.gov/Regulations-and-Guidance/Legislation/National-Physician-Payment-Transparency-Program/index.html>. [Last accessed 11 August 2015].
- [3] Ratain MJ. Forecasting unanticipated consequences of the Sunshine Act: mostly cloudy. *J Clin Oncol* 2014;32:2293–5.
- [4] International Committee of Medical Journal Editors. Available from <http://www.icmje.org/>. [Last accessed 11 August 2015].
- [5] Battisti WP, Wager E, Baltzer L, Bridges D, Cairns A, Carswell CI, et al. Good Publication Practice for communicating company-sponsored medical research: GPP3. *Ann Intern Med* 2015; [Epub ahead of print].
- [6] Citrome L. The sunshine act and transfers of value: impact on non-industry authorship. *Innov Clin Neurosci* 2014;11:1416.
- [7] Feld LD, Yeh J, Feld AD. Here comes the sun: medical professionalism and the implications of the sunshine act for gastroenterology practice. *Clin Gastroenterol Hepatol* 2014;12:1587–91.
- [8] American Society of Clinical Oncology. American society of clinical oncology: policy for relationships with companies: background and rationale. *J Clin Oncol* 2013;31:2037–42.
- [9] Harvey HB, Prabhakar AM, Oklu R. Bringing transparency to physician-industry relationships: what the physician payment sunshine act will mean for interventional radiologists. *J Vasc Interv Radiol* 2013;24:1589–92.
- [10] American medical association toolkit for physician financial transparency reports (Sunshine Act). 2014. Available from <http://www.ama-assn.org/ama/pub/advocacy/topics/sunshine-act-and-physician-financial-transparency-reports/sunshine-act-toolkit.page> [Last accessed 11 August 2015].
- [11] National Comprehensive Cancer Network. The impact of health care reform on academic cancer centers. 2014. Available from http://www.nccn.org/professionals/meetings/oncology_policy_program/pdf/2014_health_care_reform_summit_summary.pdf. [Last accessed 11 August 2015].
- [12] American Society of Clinical Oncology. Alexandria VA. The changing landscape of conflict of interest supports further study of American society of clinical oncology authorship restrictions for research studies. *J Clin Oncol* 2014;32:867–8.
- [13] Schmidt C. Open payments program (aka the Sunshine Act) makes public debut. *J Natl Cancer Inst* 2014;106:9.
- [14] Simcoe D, Juneja R, Scott GN, Sridharan K, Williams-Hughes C; ISMPP 2013 Roundtable committee. Proceedings from the 9th annual meeting of international society for medical publication professionals roundtable session: key insights. *Curr Med Res Opin* 2014;30:407–13.
- [15] Citrome L, Karagianis J, Maguire GA, Nierenberg AA. Pharmaism: a tale of two perspectives. *Int J Clin Pract* 2014;68:659–61.
- [16] Schofferman JA, Eskay-Auerbach ML, Sawyer LS, Herring SA, Arnold PM, Muehlbauer EJ. Conflict of interest and professional medical associations: The North American spine society experience. *Spine J* 2013;13:974–9.
- [17] American Society of Clinical Oncology. Physician payments sunshine act. 2014. Available from <http://www.asco.org/about-asco/physician-payments-sunshine-act>. [Last accessed 11 August 2015].
- [18] Eastern J. Is the Sunshine Act worthy of concern? *Cutis* 2014;93:178–80.
- [19] Lockhart AC, Brose MS, Kim ES, Johnson DH, Peppercorn JM, Michels DL, et al. Physician and stakeholder perceptions of conflict of interest policies in oncology. *J Clin Oncol* 2013;31:1677–82.
- [20] Pepitone K, Weigel A. Transparency and the healthcare industry: The sun is shining. *EMWA J* 2013;22:243–5.
- [21] Pham-Kanter G. Act II of the Sunshine Act. *PLoS Med* 2014;11: e1001754.
- [22] Reardon S; Nature News. Disclosing conflicts of interest has unintended effects: US database of payments to physicians is likely to complicate ties to patients and drug companies. 2014. Available from <http://www.nature.com/news/disclosing-conflicts-of-interest-has-unintended-effects-1.16077>. [Last accessed 11 August 2015].
- [23] Merino JG. Physician payment sunshine act. *BMJ* 2013;347:f4828.
- [24] Shader RI, Greenblatt DJ. The Sunshine Act. *J Clin Psychopharmacol* 2014;34:1–2.
- [25] Lewin J, Arend TE Jr. Industry and the profession of medicine: balancing appropriate relationships with the need for innovation. *J Vasc Surg* 2011;54:475–95.
- [26] Goldenberg SL. The Sunshine Act: Not a good guy versus bad guy issue. *Can Urol Assoc J* 2014;8:18.
- [27] Kirschner NM, Sulmasy LS, Kesselheim AS. Health policy basics: the physician payment sunshine act and the open payments program. *Ann Intern Med* 2014;161:519–21.
- [28] Sismondo S. Key opinion leaders and the corruption of medical knowledge: What the sunshine act will and will not cast light on. *J Law Med Ethics* 2013;41:635–43.
- [29] Liesegang TJ, Bartley GB. Toward transparency of financial disclosure. *Ophthalmology* 2014;121:2077–8.
- [30] Morain SR, Flexner C, Kass NE, Sugarman J. Forecast for the physician payment sunshine act: partly to mostly cloudy? *Ann Intern Med* 2014;161:915–16.
- [31] Spoerl R. Sunshine act may not be so bright: why hospitals, physicians are concerned. 2012. Available from <http://www.becker-shospitalreview.com/legal-regulatory-issues/sunshine-act-may-not-be-so-bright-why-hospitals-physicians-are-concerned.html>. [Last accessed 11 August 2015].
- [32] Santhakumar S, Adashi EY. The physician payment sunshine act: testing the value of transparency. *JAMA* 2015;313:234.
- [33] Overview and impact of the sunshine act on publication managers. Review of suggestions document. Available from http://www.ismpp.org/assets/docs/Initiatives/Sunshine_Act/ismpp%20task%20force%20document_final_081313.pdf. [Last accessed 11 August 2015].
- [34] Harbaugh RE. Don't throw the baby out with the bathwater. 2014. Available from <http://thehill.com/blogs/congress-blog/healthcare/207932-dont-throw-the-baby-out-with-the-bathwater>. [Last accessed August 11 2015].

Supplementary material available online