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Running Title: The Invisible Interactions Between Registered Nurses and Industry

Marketing and the Most Trusted Profession: The Invisible Interactions Between Registered Nurses and Industry

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Abstract

Background: The mainstay for addressing conflicts of interest in health care is disclosure of personal financial ties to industry. However, this approach fails to capture the complexity of industry interactions that are built into clinical practice. Further, the policy climate focuses on physicians and traditional pharmaceutical marketing.

Objective: To describe industry activities targeted at registered nurses.

Design: Qualitative, ethnographic study conducted from January 2012 to October 2014.

Setting: Four acute care hospitals in a western U.S. city.

Participants: A purposive sample of 72 participants with direct experience with industry, including staff nurses, administrators, and industry and supply chain professionals.

Measurements: Fieldwork, including observations (102 hours), semistructured in-depth interviews ($n = 51$), focus groups ($n = 4$), and documents analysis.

Results: Nurses' reported financial relationships with industry were similar to those reported by prescribers. However, nurses reported that their most significant interactions with industry occurred in daily practice. The current policy environment rendered these interactions invisible, leaving nurses with little guidance to ensure that the boundary between service and sales remained intact.

Limitations: This study could not determine the frequency or prevalence of nurse–industry interactions. The sample is not representative.

Conclusion: Nurse–industry interactions may be common and influential, but they remain invisible in the current policy climate. Although some aspects of these interactions may be beneficial, others may pose financial risks to hospitals or safety risks to patients. Disclosure strategies alone do not provide health professionals with adequate support to manage day-to-day interactions. Management of industry interactions must include guidance for nurses.

Primary Funding Source: Agency for Healthcare Research and Quality; Canadian Institutes of Health Research; and University of California, San Francisco.

With the passing of the Physician Payments Sunshine Act in the United States and similar initiatives under way globally, disclosure of personal financial ties to industry has become the mainstay for addressing conflicts of interest (COIs) in health care. The Sunshine Act was passed to bring transparency to the relationships between physicians and industry in an effort to restore the public's trust and deter COIs that are associated with increased prescribing costs and decreased prescribing safety (1, 2). Many have debated the utility of disclosure as a standalone strategy for managing COIs, questioning whether it actually mitigates bias (3) or adequately addresses industry influence on medical knowledge (4), whether this information is useful to patients (5), and whether there are significant risks for public misinterpretation (6). The payment disclosures recently published in the Open Payments database in the United States paint a clear picture of physician–industry relationships—companies have reported \$3.53 billion in general payments to physicians since 2013 (7). However, these interactions must be put into context. Payment disclosure largely fails to capture the complexity of day-to-day interactions between industry representatives and health professionals that are built into clinical practice and are often part of the job. Although many of these interactions are necessary and support clinical practice, they also offer opportunities for marketing, and the current policy climate does little to address potential risks to patients, the financial health of institutions, or the public's trust in health professionals.

Globally, policymaking has focused primarily on prescribers and traditional pharmaceutical marketing strategies. A recently proposed bill would expand the Sunshine Act to include prescribing nurse practitioners and physician assistants (8) but omits nonprescribing registered nurses (RNs) even though they represent the largest proportion of health professionals. The public consistently rates nursing as the “most trusted profession,” suggesting that nurses are a key part of the health care team (9). Both actual and perceived COIs may threaten nurses' status as the most trusted professionals in the eyes of the public and may jeopardize their relationships with patients (10). Yet, almost nothing is known about the ways that RNs interact with industry, though research suggests they may have become an important “soft target” for industry and a back door to prescribers in light of increasing restrictions on physician–industry interactions (11, 12). This has been accompanied by a shift within the medical industry away from

traditional marketing channels targeted at physicians, including a reduction in face-to-face marketing and an increase in marketing directed at nonphysician clinicians, payers, and patients (13).

This article draws on qualitative data from an in-depth study of interactions between nurses and industry in U.S. acute care hospitals. Direct observation of these interactions and interviews with nurses and industry representatives suggest that these interactions may be common and influential. Drawing from these data, we explore key assumptions held by participants, namely that nurses do not interact with industry, that such interactions are not marketing, and that marketing to nonprescribers is of no consequence. To minimize the influence of COIs on decision making, and given the interdisciplinary nature of current health care, policies addressing COIs must include guidance on the ethical conduct of nurse–industry interactions.

Methods

Study Design

We conducted an ethnographic study at 4 acute care hospitals in the metropolitan area of a western U.S. city and at a national conference. Interpretive phenomenology served as the analytic approach, which allowed in-depth exploration of the phenomenon without presupposing the nature of nurse–industry interactions or assuming they were similar to interactions between prescribers and sales representatives (14, 15). The University of California, San Francisco, Committee on Human Research approved the study (study #11-06480). The methods are reported according to the COREQ (Consolidated Criteria for Reporting Qualitative Research) guidelines (16).

Settings, Recruitment and Data Collection

Table 1 presents characteristics of hospitals that were purposively selected to reflect a spectrum of institutional types. To enhance rigor, we used 4 methods of data collection (17): targeted observation of nurse–industry interactions, focus groups with RNs, individual interviews, and documents analysis. One of the authors (Q.G.), who is an RN and qualitative researcher, conducted fieldwork from January 2012 through October 2014. Participants ($n = 72$) with direct experience of nurse–industry interactions were purposively recruited through institutional listservs, through direct e-mail contact, and via snowball

sampling (18). Targeted observations during which field notes were taken (102 hours) included shadowing of sales representatives conducting in-service training (10 hours) and providing device support (15 hours) and attendance at purchasing committee meetings (9 hours) and sponsored events (12 hours). One of the authors (Q.G.) conducted 51 semistructured individual interviews (15 to 90 minutes each) and 4 focus groups ($n = 21$; 60 to 90 minutes each) at participants' workplaces, which were audio-recorded and transcribed and were guided by open-ended questions seeking examples of positive, negative, and ideal experiences involving industry interactions. The focus groups supplemented the interview data by providing a professional context where participants could actively discuss commonalities and differences in their experiences (19). We purposively sampled 12 institutional policies and collected a convenience sample of 65 marketing materials encountered during fieldwork.

Participants

Table 2 describes characteristics of the sample, which included nonprescribing RNs ($n = 56$ of 72 [78%]) and nonnurses, such as administrators and industry and supply chain professionals. Forty-nine participants (38 of whom were RNs) permitted collection of demographic information; the majority were female (76%) and white (71%) and had a master's degree (58%).

Data Analysis

We analyzed all transcripts, field notes, and documents in NVivo, version 10.0 (QSR International). One of the authors (Q.G.) conducted preliminary coding. The research team met regularly to review raw data, emerging codes, and analytic memos. To be consistent with interpretive phenomenology methods, we conducted narrative analysis for all concrete stories and thematic analysis based on iteratively generated interpretive codes (14, 20).

Role of the Funding Source

This study was funded by a doctoral research award from the Canadian Institutes of Health Research and a grant from the Agency for Healthcare Research and Quality. One of the authors (Q.G.) was supported by a fellowship from the University of California, San Francisco. The funding sources had no role in the design or conduct of the study; the collection, management, analysis, or interpretation of the

data; the preparation, review, or approval of the manuscript; or the decision to submit the manuscript for publication.

Results

All RN participants ($n = 56$) reported interacting with industry in the past year. One-on-one meetings with sales representatives, which had occurred an average of 13 times in the past year, were the most common form of interaction. In addition, nurses reported attendance at sponsored lunches, dinners, or events ($n = 39$ of 56); offers of gifts ($n = 40$ of 56) or product samples ($n = 34$ of 56); and receipt of paid travel or payments for participation in market research, speakers' bureaus, or consulting ($n = 15$ of 56). Nurses reported interacting mostly with the medical device industry ($n = 47$ of 56) but also with the pharmaceutical ($n = 31$ of 56), health technology ($n = 12$ of 56), and infant formula industries ($n = 2$ of 56).

Table 3 provides illustrative quotations describing the daily interaction between nurses and industry. One quarter of nurses ($n = 14$ of 56) remarked that they had never discussed this aspect of their practice before and struggled at first to identify specific industry interactions. Though "classic" industry interactions often came to mind first, such as attendance at dinners sponsored by pharmaceutical companies, interactions with sales representatives on the job were the focus of interviews. Most nurses ($n = 33$ of 56) acknowledged benefits of working with industry representatives, and more than one quarter ($n = 16$ of 56) noted that it would be impossible to do their jobs without industry resources. For example, nurse educators coordinated in-service education with sales representatives on every newly purchased product, nurse managers relied heavily on sales representatives when selecting products for purchase, and staff nurses worked alongside sales representatives on a daily basis during surgery.

However, many nurses ($n = 39$ of 56) reported challenges with industry interactions. Table 3 provides illustrative examples of these challenges, including struggling to ensure that sales representatives adhered to hospital policy, biased information sources, introduction of unapproved devices, lack of accountability for product failure, and threats to patient safety and privacy.

"It Doesn't Happen Here"

Administrators at 8 institutions were initially approached; however, most asserted that nurse–industry interactions “didn’t happen” at their hospitals and that “nurses didn’t have much interface” with industry. They were not aware of interactions occurring outside the workplace, and those that occurred in the workplace were not considered industry interactions. None of the hospitals’ policies on industry explicitly referenced nurses or nursing practice. Table 3 illustrates the invisibility of nurse–industry interactions at the level of administration and policy.

Hospitals relied on many nurse–industry interactions, such as product support during surgery or contracted in-service education, such that sales representatives became familiar fixtures in the clinical setting and were often essential to its functioning. Nurses ($n = 25$ of 56) described the blurring of boundaries between service and marketing. However, these on-the-ground aspects of these relationships were largely unknown to administrators.

An example of the reliance on nurse–industry interactions was in-service education. When a product is purchased by a hospital, the purchasing contract typically specifies that the company will provide in-service education to staff nurses as a means to introduce the product. Administrators characterized this as a 1-time, 1-way, contracted event that was therefore outside the scope of industry relations policy even though a sales representative delivered the education. However, nurses who were responsible for in-service education experienced industry-delivered in-service education as a different phenomenon that was more akin to marketing. Participants pointed to several ways in which industry representatives used in-service education as an opportunity to foster ongoing relationships with nurses, to grow the indications for a product’s use, and to sell related products. Given the apparent institutional endorsement, nurses ($n = 26$ of 56) perceived that sales representatives engaged in in-service education had been vetted, opening the door to further interaction. One nurse educator explained that she had “no reason to entertain somebody that cold calls” but that she would “entertain the folks that are already ‘in,’ so to speak...that have a new or improved way to use something that’s already in use.” Many participants, including administrators and the nurses themselves ($n = 26$ of 72), asserted that the contact nurses had with industry was within the confines of institutional policy. This characterization

greatly benefited industry because it ensured that marketing to nurses was “under the radar” and institutionally sanctioned. However, more than one quarter of nurses ($n = 16$ of 56) expressed ambivalence about having to rely on industry-provided resources in order to do their jobs (Table 3). A nurse manager explained that he welcomed product support during surgery because sales representatives were experts in the use of the equipment, but he resented aggressive sales tactics that created costs for his department and sometimes threatened patient safety, such as a representative’s coat being left in a sterile field, a failure to acknowledge or address equipment malfunction, or a new product that had not been vetted by the institution being pulled out of the representative’s bag during a procedure. The institutional invisibility of these on-the-ground interactions left nurses to police the boundary between service and sales, which they often did on an individual and ad hoc basis.

Why Market to Nurses?

The notion that marketing to nurses did not occur was bolstered by the assumption that marketing to clinicians who could not prescribe was pointless. Table 3 provides examples of how some nurses explicitly wondered at the inclusion of nonprescribers in marketing or the belief that institutional policy did not pertain to nonprescribers. Yet, most participants ($n = 46$ of 72), including industry professionals, provided concrete examples where nurses had influenced treatment and purchasing decisions. About one third ($n = 20$ of 56) were standing members of institutional purchasing committees. Industry professionals characterized nurses as a key audience because they had direct contact with industry’s ultimate marketing targets: patients, prescribers, and purchasers.

Marketing to nurses was widely considered innocuous because it was difficult to link it to a particular decision, as is the case with pharmaceutical marketing and a prescription. Instead, nurses described their ability to control the distribution of resources and to affect patient care and institutional systems as “influence.” For example, one infection control nurse served on all of the purchasing committees at her hospital. She explained that for every product being considered for purchase, “my concerns have to be addressed before we make a final decision to go with a company or against a

company.” This nurse reported that she was heavily courted by sales representatives who sought to form a relationship with her and to provide product information, gifts, and samples.

Table 3 presents the perspectives of nurses ($n = 17$ of 56) who viewed this kind of contact with industry as validation: Industry representatives recognized the scope of their influence but also sought their expertise in terms of feedback on products and the needs of patients, prescribers, and other end users.

Discussion

Registered nurses described financial relationships with industry that took place outside their workplace that were similar to those reported by colleagues who were physicians or prescribing nurses (12, 21–23). Yet, nurses reported that the most significant interactions with industry occurred in day-to-day practice, both because these interactions were frequently necessary to their practice and because they found them practically and ethically challenging. However, the current policy environment rendered these kinds of interactions institutionally invisible, leaving nurses with little guidance to ensure that the boundary between service and sales remained intact. We analyze 3 assumptions voiced in this study to prompt discussion about how these interactions can be better supported.

The first assumption was that nurses do not interact with industry. There is conspicuously little discussion of nurse–industry interactions within the literature (11, 12), no mention of industry interactions in the code of ethics for RNs (24), and only 1 empirical study of such interactions globally (12, 25). Many administrators assumed that nurses did not interact with industry representatives, which may have been partly due to the persistent invisibility of nursing work in general in an economic climate that has no way to quantify the value of nurses’ work (26, 27). The frontline aspects of many industry interactions occur under the radar. For example, the daily interactions between nurses and sales representatives supporting pacemaker care might include contacting the representative, ensuring that they have access to the clinical area, and facilitating their contact with the patient. This might also include ensuring that the representative is wearing a badge and does not bring coffee into the control room and advocating for the patient in the case of a breach of privacy or attempts to introduce unapproved devices. However, without

institutional support and recognition for this kind of work, patients may be vulnerable and institutions may bear additional, unnecessary costs due to “upselling” and similar practices.

The second assumption was that nurse–industry interactions are not marketing and are thus ethically neutral. Although industry interactions were often part of the job, they also presented opportunities for selling related products, introducing unapproved products, or building relationships with decision makers. Institutional policy represented an effort to ensure that interactions with industry occurred on the basis of legitimate service needs, but these policies also rendered the sales that sometimes accompanied the service invisible. For example, industry representatives who manage surgical sets and assist surgeons and nurses during surgical procedures work largely on commission rather than salary, creating clear incentives to push increased product use or use of more expensive products. Clinicians are left to ensure that the boundary between service and sales remains intact but will do so on an individual basis unless the incentives are realigned.

The third assumption was that nurses, as nonprescribers, have little to offer in terms of power or control over resources, and marketing directed at them is therefore of little consequence to patients or the health care system. Despite offering many examples of their influence over treatment and purchasing decisions, including participation in or oversight of institutional purchasing, some nurses remained mystified by their inclusion in marketing. However, prescribers are not the only decision makers in clinical practice settings. The prescription and the order are collective processes, and the contributions of all participants need to be recognized. Otherwise, nurses and others working within clinical practice may be susceptible to marketing efforts because industry attention is viewed as validation. In a study of senior RNs in New Zealand, nurses were generally willing and believed it was ethical to accept industry information, gifts, and sponsorship, justifying this in terms of perceived equity (“But doctors do”) (25). Current institutional policy could be amended to ensure a more comprehensive approach to controlling marketing influence within clinical settings. To address the oversight of nurses’ interactions with industry, policies must be inclusive of all disciplines. For example, the Sunshine Act should be expanded to include all registered health professionals (regardless of whether they have prescriptive authority) and all types of

health care institutions. Nurses at all levels of the institutional hierarchy should be included in the development of university and hospital industry relations policy to ensure that policy is relevant to their practice. The nursing profession should take a leadership role in supporting nurses' work with industry by incorporating this into professional codes of ethics, adopting COI policies in nursing schools and professional associations, and incorporating preparation for interactions with industry into curricula. Industry representatives working in a support capacity have also pointed to the lack of clearly defined roles, which has been identified as a source of moral distress (28). To clearly separate service from sales, the roles for industry support personnel must be clearly defined, and staff need regular training to ensure that boundaries are maintained, especially around patient care. Industry representatives should be used to augment clinical expertise, not to outsource it; thus, industry-delivered education should be supervised by hospital staff. If industry wants to ensure that its expertise is credible, a clear separation of sales and support needs to occur; for example, industry support personnel should be salaried and should not work on commission for the products they support. Hospitals need to invest in in-house education and support, which is vital for ensuring unbiased, evidence-based continuing education and adherence to hospital policy.

Finally, to work against the assumption that marketing to nurses is of no consequence, hospital administrators need to recognize and support nurses' work with industry. Such work through purchasing and product evaluation committees should be supported with policies and tools to identify and manage COIs and to support independent evidence-based and cost-effective decision making. For example, hospitals could establish in-house product evaluation centers so that nurses could share their expertise as end users and evaluate products independently from sales representatives. Interacting with industry is a reality for practicing nurses in acute care hospitals. This should be made visible and explicitly identified in job descriptions, should be part of staff orientation, and should be regularly supported through continuing education that addresses the ethical and practical aspects of industry relations.

This study has limitations. It could not determine the frequency or prevalence of nurse–industry interactions. Because the sample was purposive, it included participants who had direct experience or

interest in the phenomenon being studied and is therefore not representative. Similarly, there may be important differences among acute care hospitals and the educational preparation or scope of practice for RNs across the United States and internationally. Although we approached 8 institutions, only 4 permitted access; thus, nonacademic, private, not-for-profit hospitals were not represented in this sample. However, academic medical centers have been leaders in implementing industry relations policies (29–31), so the interactions described here may be characteristic of those in a more stringent policy environment. Finally, because this purposive sample was drawn from acute care settings and specialties with a high rate of technology adoption, nurses in this study interacted mostly with the medical device industry. Clinician interactions with other industries and in settings outside acute care require further exploration. Nevertheless, this in-depth description of the relationships between nonprescribing nurses and industry may have important implications for multidisciplinary teams. Further, nurses reported interacting with sales representatives of multinational companies whose marketing operations have global reach. Thus, it is important that further research be conducted internationally to determine whether these types of nurse–industry interactions occur globally.

In conclusion, this examination of the interactions between nurses and industry suggests that although these interactions may be common, paradoxically they are institutionally invisible. Although some aspects of these interactions may be beneficial, others may pose unidentified risks to the financial viability of hospitals, the safety of patient care, and the preservation of the public’s trust in the health care system. Disclosure strategies alone do not provide health professionals with adequate support to manage day-to-day interactions with industry in an ethical, safe, and cost-effective manner. Instead, policies that include all health care disciplines and aim to manage marketing and COIs are required.

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Reproducible Research Statement: *Study protocol:* Available from Dr. Grundy (e-mail, quinn.grundy@sydney.edu.au). *Data set:* Not available.

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References

1. Medicare, Medicaid, Children's Health Insurance Programs: Transparency Reports and Reporting of Physician Ownership or Investment Interests, 78 Fed. Reg. 9457 (2013).
2. Pew Prescription Project. Addressing Cost and Quality: The Physician Payments Sunshine Act. Philadelphia: Pew Foundation; 2009.
3. Rosenbaum L. Understanding bias—the case for careful study. *N Engl J Med*. 2015;372:1959-63. [PMID: 25970055] doi:10.1056/NEJMms1502497
4. Sismondo S. Key opinion leaders and the corruption of medical knowledge: what the Sunshine Act will and won't cast light on. *J Law Med Ethics*. 2013;41:635-43. [PMID: 24088154] doi:10.1111/jlme.12073
5. Santhakumar S, Adashi EY. The Physician Payment Sunshine Act: testing the value of transparency. *JAMA*. 2015;313:23-4. [PMID: 25473969] doi:10.1001/jama.2014.15472
6. Morain SR, Flexner C, Kass NE, Sugarman J. Forecast for the Physician Payment Sunshine Act: partly to mostly cloudy? *Ann Intern Med*. 2014;161:915-6. [PMID: 25265454] doi:10.7326/M14-1683
7. Centers for Medicare & Medicaid Services. The Facts About Open Payments Data. Baltimore: Centers for Medicare & Medicaid Services; 2015. Accessed at <https://openpaymentsdata.cms.gov> on 18 September 2015.
8. Ornstein C. Bill would add nurses, physician assistants to pharma payments database. ProPublica. 8 October 2015. Accessed at www.propublica.org/article/bill-would-add-nurses-physician-assistants-to-pharma-payments-database on 8 October 2015.
9. Riffkin R. Americans rate nurses highest on honesty, ethical standards. Gallup. 18 December 2014. Accessed at www.gallup.com/poll/180260/americans-rate-nurses-highest-honesty-ethical-standards.aspx on 12 October 2015.
10. Crigger NJ. Towards understanding the nature of conflict of interest and its application to the discipline of nursing. *Nurs Philos*. 2009;10:253-62. [PMID: 19743969] doi:10.1111/j.1466-769X.2009.00412.x

11. Jutel A, Menkes DB. Soft targets: nurses and the pharmaceutical industry. *PLoS Med*. 2008;5:e5. [PMID: 18254652] doi:10.1371/journal.pmed.0050005
12. Grundy Q, Bero L, Malone R. Interactions between non-physician clinicians and industry: a systematic review. *PLoS Med*. 2013;10:e1001561. [PMID: 24302892] doi:10.1371/journal.pmed.1001561
13. Mackey TK, Liang BA. Physician payment disclosure under health care reform: will the sun shine? *J Am Board Fam Med*. 2013;26:327-31. [PMID: 23657702] doi:10.3122/jabfm.2013.03.120264
14. Background and method. In: Benner P, Tanner C, Chesla C. *Expertise in Nursing Practice: Caring, Clinical Judgment, and Ethics*. 2nd ed. New York: Springer Publishing; 2009:351-72.
15. Chan GK, Brykczynski KA, Malone RE, Benner P. *Interpretive Phenomenology in Health Care Research*. Indianapolis: Sigma Theta Tau International; 2010.
16. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19:349-57. [PMID: 17872937]
17. Rothbauer PM. Triangulation. In: Given LM, ed. *The SAGE Encyclopedia of Qualitative Research Methods*. Thousand Oaks, CA: Sage; 2008:893-4.
18. Hammersley M, Atkinson P. *Ethnography Principles in Practice*. New York: Routledge; 1983.
19. Kamberelis G, Dimitriadis G. Focus groups: strategic articulations of pedagogy, politics, and inquiry. In: *The Sage Handbook of Qualitative Research*. Thousand Oaks, CA: Sage; 2005:887-907.
20. Benner P. Appendix A. In: Benner P. *Expertise in Nursing Practice: Caring, Clinical Judgment, and Ethics*. Thousand Oaks, CA: Sage; 1996:351-72.
21. Campbell EG, Rao SR, DesRoches CM, Iezzoni LI, Vogeli C, Bolcic-Jankovic D, et al. Physician professionalism and changes in physician-industry relationships from 2004 to 2009. *Arch Intern Med*. 2010;170:1820-6. [PMID: 21059976] doi:10.1001/archinternmed.2010.383
22. Ladd EC, Mahoney DF, Emani S. "Under the radar": nurse practitioner prescribers and pharmaceutical industry promotions. *Am J Manag Care*. 2010;16:e358-62. [PMID: 21291293]

23. McNeill PM, Kerridge IH, Henry DA, Stokes B, Hill SR, Newby D, et al. Giving and receiving of gifts between pharmaceutical companies and medical specialists in Australia. *Intern Med J.* 2006;36:571-8. [PMID: 16911549]
24. American Nurses Association. Code of Ethics for Nurses with Interpretive Statements. Silver Spring, MD: American Nurses Association; 2015.
25. Jutel A, Menkes DB. "But doctors do it...": nurses' views of gifts and information from the pharmaceutical industry. *Ann Pharmacother.* 2009;43:1057-63. [PMID: 19470854]
doi:10.1345/aph.1M027
26. Lasater KB. Invisible economics of nursing: analysis of a hospital bill through a Foucauldian perspective. *Nurs Philos.* 2014;15:221-4. [PMID: 24279477] doi:10.1111/nup.12040
27. Welton JM, Zone-Smith L, Fischer MH. Adjustment of inpatient care reimbursement for nursing intensity. *Policy Polit Nurs Pract.* 2006;7:270-80. [PMID: 17242392]
28. Mueller PS, Ottenberg AL, Hayes DL, Koenig BA. "I felt like the angel of death": role conflicts and moral distress among allied professionals employed by the US cardiovascular implantable electronic device industry. *J Interv Card Electrophysiol.* 2011;32:253-61. [PMID: 21861198] doi:10.1007/s10840-011-9607-8
29. Brennan TA, Rothman DJ, Blank L, Blumenthal D, Chimonas SC, Cohen JJ, et al. Health industry practices that create conflicts of interest: a policy proposal for academic medical centers. *JAMA.* 2006;295:429-33. [PMID: 16434633]
30. Institute of Medicine. Conflict of Interest in Medical Research, Education, and Practice. Washington, DC: National Academies Pr; 2009.
31. Rothman DJ, Chimonas S. Academic medical centers' conflict of interest policies. *JAMA.* 2010;304:2294-5. [PMID: 21098775] doi:10.1001/jama.2010.1714

Table 1. Institutional Characteristics

Table 2. Participant Characteristics

Table 3. Key Themes and Illustrative Quotations

Editors' Notes

Context

Concerns about conflicts of interest among health care workers have focused on interactions between industry representatives and prescribing clinicians.

Contribution

The researchers determined that nonprescribing nurses have financial relationships with industry representatives that are similar to those of prescribers. They also have other interactions that could affect patient care, and these interactions are currently not recognized as important.

Caution

The study sample was small and unrepresentative.

Implication

Disclosure of financial relationships may not be sufficient to identify all important interactions between industry representatives and health care workers, especially for nonprescribers.

Table 1. Institutional Characteristics

Site	Funding	Beds, <i>n</i>	Patients per Year, <i>n</i>	Magnet Status*	Revenue	Specialties
1	Publicly owned and operated	>400	600 000	No	Safety net hospital; 75% of patients uninsured or enrolled in Medicaid	Level 1 trauma center
2	Not-for-profit, public university–affiliated	650	1 000 000	Yes	\$1.5 billion per year	Ranked nationally for specialty services
3	Not-for-profit, private university–affiliated	475	1 500 000	Yes	\$2.5 billion per year	Ranked nationally for specialty services
4	Private, for-profit, Hospital Corporation of America affiliate	400	150 000	No	Not disclosed	Accredited specialty center

* Awarded by the American Nurses Credentialing Center in recognition of satisfaction of voluntary criteria measuring the strength and quality of nursing care and leadership.

Table 2. Participant Characteristics

Characteristic	Participants, <i>n</i>	RN, %
Total sample		
Job title		
Staff nurse	26	100
Advanced practice nurse*	20	100
Industry professional	14	36
Administrator†	6	67
Supply chain professional	5	20
Physician	1	0
Total	72	78
RN sample		
Clinical specialty		
Critical care	14	—
Medical-surgical	9	—
Other‡	9	—
Perioperative	6	—
Industry-employed	5	—
Cardiovascular	4	—
Interventional cardiology	3	—
Oncology	3	—
Pediatrics and neonatology	3	—
Total	56	—

RN = registered nurse.

* Participants working as a nurse manager, nurse educator, or clinical nurse specialist.

† Participants at the director and executive level within the hospital; included RNs and nonnurses.

‡ Included outpatient and ambulatory care, psychiatry, infection control, emergency, and dialysis.

Table 3. Key Themes and Illustrative Quotations

Key Theme	Illustrative Quotations
High degree of interaction	<p>“Traditionally, there’s a lot of literature on how marketing happens to <i>physicians</i>, but here it happens tremendously to nurses, because the nurses are on the front line: A, they’re here all the time and accessible; B, they’re dealing with the patient directly; and C, they’re the ones that sit on the [purchasing] Committee.” (Administrator)</p> <p>“In the past, we always think of physicians and the companies, and they have to disclose their relationships. But more and more so, <i>nurses</i> are asked. I mean, half the time on those [drug dinner] flyers, it’s not an MD, it’s an NP, an RN giving the talk at a fancy restaurant.” (Staff nurse, medical-surgical)</p>
Benefits of industry interactions	<p>“And we love that [industry-delivered in-service sessions] are part of the contract, because we don’t actually have the bandwidth to spend the time with every product. It would consume us completely. So it’s great they’re helping out.” (Nurse educator, critical care)</p> <p>“But we will definitely call a rep if there’s any issue with positioning in the middle of the night...she knows the machine backwards, forwards, and sideways. She may not know exactly how to correct the problem...but she can make recommendations. And if nothing else, she sits there and holds the staff’s hand to a certain extent, which makes them feel pretty good that they’ve got support in the middle of the night.” (Clinical nurse specialist, cardiovascular surgery)</p>
Challenges with industry interactions	<p>Biased information</p> <p>“What gets really challenging is when [the education] spills over into marketing and sales. When there’s this angle on why <i>my</i> product is better than my competitor’s product for doing X, Y, Z. We want nurses to be able to critique research, but frequently, research that gets published from industry is going to have a certain spin...And so to find that right balance between the education and the marketing I think is tricky—a really tricky thing.” (Clinical nurse specialist, cardiology)</p> <p>Financial cost</p> <p>“I’m sensitive, but hopefully not overly sensitive to the fact that this is our budget. This is the <i>hospital’s</i> budget when you talk about capital equipment and how much of that profit then goes into the advertising—parties at [conferences], donuts for the nurses, dinners at Ruth’s Chris for the physicians—I’m sensitive to that.” (Nurse manager, cardiovascular care)</p> <p>Patient safety</p> <p>“No vendor should ever do patient care. That means they shouldn’t open [sterile] packages. They shouldn’t do anything. We have caught vendors doing that. Our staff says a lot, ‘Oh, I was busy. They were helping.’ They’re not allowed to do that. How do I know how qualified they are at aseptic technique or anything else?” (Nurse educator, perioperative care)</p>
Invisibility of nurse–industry interactions	<p>“I got an email, ‘Somebody wants to do a study about industry and wants access to the hospital, what do you think?’ And one of the directors said, ‘The nurses don’t have much interface with them,’ and I’m like, ‘Are you freaking kidding me?’ I did. I said that, because I thought, ‘They are so disconnected, our administrators.’” (Clinical nurse specialist, critical care)</p> <p>“I never really felt like [the hospital policy] affected me that much that I had to necessarily read the fine print. I just vaguely am kind of aware that I should not be taking quote-unquote “bribes” from companies. But because I’m not prescribing—it never really seemed to affect me directly.” (Staff nurse, pediatrics)</p>

Ambivalence about industry resources	<p>“We really don’t have the manpower to do [the education] ourselves, but on the other hand, there’s this real obligation on our part to make sure that we know what [the representatives] are saying, and that we have some influence on that. And it can be difficult to do.” (Nurse educator, medical-surgical)</p> <p>“I have a good relationship with reps that don’t manipulate, that help us to drive the price down, tell us how to work with the company to get the best prices or the best products...Trust with reps—I don’t think they can be trusted, period. That’s the sad thing. There’s too much money involved.” (Nurse manager, perioperative care)</p>
Marketing to nonprescribers	<p>“I don’t know if he was inviting me just because he thought I was attractive, or if he knew I was the medication adherence person and wanted to get that angle too. He definitely wasn’t pursuing me as hard as the reps would always pursue the prescribers.” (Staff nurse, outpatient HIV care)</p> <p>“If we don’t have the persuasiveness power to determine what drugs the patients use, I don’t see why the reps would want to have us go to these talks [drug dinners]. I really don’t. We think of it as a free meal.” (Staff nurse, cardiovascular care)</p>
Nurses’ influence on treatment and purchasing	<p>“[Marketing] is nurse-focused when it has to do with patient experience...They really want to know, ‘How are the patients really doing with this? Do patients really take it? Do they pick it up from the pharmacy? Are they having trouble?’ Because we help the patients get their authorizations.” (Staff nurse, ambulatory care)</p> <p>“A vendor can be motivated to come to nursing by the fact that not only if nurses are good at using it, but if they think it’s a better tool than what’s generally used, or it’s a way to fix a problem that usually doesn’t have an intervention to fix it—that we’ll ask the doctors to order it, or we’ll use it more as an intervention for that patient.” (Nurse educator, medical-surgical)</p>
Industry contact as validation	<p>“So for me, with these corporate entities, communicating with nurses, I think in some ways it gives me a voice, because it helps me become part of that team. I’m being recognized as a health care provider.” (Staff nurse, oncology)</p> <p>“I go to [electronic health record company’s] users group meeting, which is...<i>all</i> vendor-sponsored. There’s lots of free food, and if I speak, I get everything—I don’t have to pay to get there, and I still have to pay for my hotel and my flight, so it’s not that fancy, but it’s interesting. It’s a different world. It’s not something that nurses usually get to do.” (Nurse educator, medical-surgical)</p>

NP = nurse practitioner; RN = registered nurse.