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# Commentary: Industry Payments to Spine Surgeons from 2014 to 2019: Trends and Comparison of Payments to Spine Surgeons Versus All Physicians

Akshay V. Daji<sup>1</sup>, Devin Q. John<sup>1</sup>, Raj D. Rao<sup>2\*</sup>

<sup>1</sup>HCA JFK Hospital/University of Miami Miller School of Medicine Orthopaedic Surgery Residency Program, FL, USA

<sup>2</sup>West Palm Beach VA Healthcare System, West Palm Beach, FL, USA

### **Article Info**

#### **Article Notes**

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# \*Correspondence:

\*Dr. Raj D. Rao, Chief Surgical Services, VA Health Care System, West Palm Beach, FL, USA; Email: Rajkumar.Rao@va.gov

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The passage of the Physician Payments Sunshine Act in 2010 was intended to strengthen the ethical framework surrounding medical device manufacturer, pharmaceutical industry, and other healthcare industry payments to physicians in the United States<sup>1</sup>. The regulatory requirement for industry to disclose all physician payments was anticipated to markedly reduce the amount of these payments and reduce potential conflict in healthcare decision making, thereby improving outcomes of care. Our study found, however, that industry payments to physicians paradoxically increased 8.7% over the period from 2014-20191. Other authors have found similar increases in payments to physicians of varying specialties<sup>2-7</sup>. While some studies have reported stagnant<sup>2,5,8,9-11</sup> or decreasing payments to some specialties<sup>12</sup>, there has not been the unified decrease in industry payments to physicians as was anticipated after the passing of the Sunshine Act. Since the passage of the Sunshine Act, Australia and several European nations have enacted their own transparency laws, however literature investigating the effect on physician payments is limited.

Our study found that while general payments to all physicians increased over the 2014-2019 period, payments to spine surgeons decreased 17.5%. We also found a similar trend of a 24.9% reduction in industry funding for research carried out by spine surgeons, while research funding for all physicians increased 8.9%<sup>1</sup>. Notwithstanding the slowdown, average payments to spine surgeons were still 400% higher than average payments to other physicians, and a smaller subset of spine surgeons received these larger payments<sup>1</sup>. Our finding that 83.5% of payments went to 6.6% of all spine surgeons appears to replicate findings of similar studies for other specialties. Pathak et al. in separate studies found the highest compensated 1% of spine surgeons, 5% of pediatric orthopedic surgeons, and 5% of foot and ankle orthopedic surgeons received 55%, 71%, and 91% of all industry payments, respectively<sup>2,3,8</sup>. White et al. similarly reported the top 3% of adult reconstruction orthopedic surgeons received 67% of industry payments<sup>4</sup>. Additionally, there has been a consistent trend across published literature of the majority of industry payments originating from a minority of manufacturers going to a small subset of surgeons. The present study found the eight highest spending companies accounted for about 72% of payments to physicians during the study period and 6.6% of compensated spine surgeons received 83.5% of payment value1.

This concentration of industry payment from a small number of manufacturers to a select group of presumably influential surgeons underscores the importance of maintaining transparency in interactions between industry and surgeons. While a collaborative relationship between industry and surgeons can drive continued advancements in the field, gratuitous relationships can knowingly or unknowingly introduce conflict into decisions on patient care and quickly erode public trust in the profession at large or individual specialties. Maintaining trust in the doctorpatient relationship forms the basis of any treatment and therapeutic effect we anticipate in our patients.

The abundant resources of the healthcare industry can be a double-edged sword – with industry able to sponsor large, multicenter clinical trials, however, a focus on profitability can quickly lead to a prioritization of investments with higher potential for financial returns, leading to a shift away from important but perhaps less profitable areas of research. The reduction in payments to spine surgeons over the 2014-2019 period potentially reflects one such industry recognition of decreasing reimbursement and profitability of this field. With 74% of spine device trials sponsored by industry<sup>13</sup>, slight changes in industry investments can result in stagnation of innovation and research in the field. It is imperative that healthcare providers and industry partners strike a balance between financial priorities of the industry and the needs and well-being of patients.

The changing dynamic of industry payments to physicians may be a symptom of a larger process of healthcare commercialization in the United States that may be spreading into other areas of practice management. Revenue-driven healthcare systems can result in financial sustainability and ensure long-term viability of hospitals and healthcare facilities, but a fixation on the bottom line can lead to a focus on short-term profitability at the expense of patient outcomes and physician satisfaction. Private equity firms with the promise of streamlined operations, increased financial efficiency, and greater revenue are similarly increasingly taking over independent physician practices facing increased competition from consolidated healthcare systems with locked referral networks. The fundamental issues underlying corporate financing and physician behavior are the patients' trust in their physician, appropriate decision making for the individual patient, and healthcare system costs. As physicians, we must ensure that our decisions regarding patient care are based entirely on the ethics of prioritizing patient safety and quality of care. Paradoxically, the ability to practice healthcare with only the patient's best interest in the forefront may play a role in reducing the increasing physician burnout seen in recent years<sup>14,15</sup>. Decreased autonomy reduces the enthusiasm that drove us to the medical field at the start of our careers. Addressing these issues is something we owe to our patients and subsequent generations of physicians.

## References

- Thomas G, Bornstein S, Cho K, et al. Industry payments to spine surgeons from 2014 to 2019: trends and comparison of payments to spine surgeons versus all physicians. The Spine Journal. 2022; 22(6): 910-920. doi:10.1016/j.spinee.2022.01.008
- Pathak N, Mets EJ, Mercier MR, et al. Industry Payments to Pediatric Orthopaedic Surgeons Reported by the Open Payments Database: 2014 to 2017. Journal of Pediatric Orthopaedics. 2019; 39(10): 534-540. doi:10.1097/BPO.000000000001375
- Pathak N, Galivanche AR, Lukasiewicz AM, et al. Orthopaedic Foot and Ankle Surgeon Industry Compensation Reported by the Open Payments Database. Foot & Ankle Specialist. 2021; 14(2): 126-132. doi:10.1177/1938640020903145
- Braithwaite J, Frane N, Partan MJ, et al. Review of Industry Payments to General Orthopaedic Surgeons Reported by the Open Payments Database: 2014 to 2019. JAAOS Glob Res Rev. 2021; 5(5): e21.00060. doi:10.5435/JAAOSGlobal-D-21-00060
- 5. White PB, Iturriaga C, Frane N, et al. Industry Payments to Adult Reconstruction-Trained Orthopedic Surgeons: An Analysis of the Open Payments Database From 2014 to 2019. The Journal of Arthroplasty. 2021; 36(11): 3788-3795. doi:10.1016/j.arth.2021.07.004
- Cuomo RE, Cai M, Shah N, et al. Physicians payment in the United States between 2014 and 2018: An analysis of the CMS Open Payments database. Wilson FA, ed. PLoS ONE. 2021; 16(6): e0252656. doi:10.1371/journal.pone.0252656
- Morse E, Fujiwara RJT, Mehra S. Increasing Industry Involvement in Otolaryngology: Insights from 3 Years of the Open Payments Database. Otolaryngol--head neck surg. 2018; 159(3): 501-507. doi:10.1177/0194599818778502
- Pathak N, Mercier MR, Galivanche AR, et al. Industry Payments to Orthopedic Spine Surgeons Reported by the Open Payments Database: 2014–2017. Clinical Spine Surgery: A Spine Publication. 2020; 33(10): E572-E578. doi:10.1097/BSD.0000000000000993
- Clennon EK, Lam M, Manley A, et al. Patterns of Industry Payments to Urologists From 2014-2018. Urology. 2020; 140: 44-50. doi:10.1016/j. urology.2020.02.021
- 10. Annapureddy A, Murugiah K, Minges KE, et al. Industry Payments to Cardiologists: An Analysis of the Open Payments Program From 2014 to 2016. Circ: Cardiovascular Quality and Outcomes. 2018; 11(12): e005016. doi:10.1161/CIRCOUTCOMES.118.005016
- 11. Marshall DC, Tarras ES, Rosenzweig K, et al. Trends in Industry Payments to Physicians in the United States From 2014 to 2018. JAMA. 2020; 324(17): 1785. doi:10.1001/jama.2020.11413
- Murayama A, Nakano K, Kamamoto S, et al. Trend in industry payments to infectious disease physicians in the United States: a seven-year analysis of nonresearch payments from the Open Payments Database between 2014 and 2020. Clinical Microbiology and Infection. 2022; 28(12): 1655.e1-1655.e4. doi:10.1016/j.cmi.2022.07.023
- 13. Cher DJ, Capobianco RA. Spine device clinical trials: design and sponsorship. The Spine Journal. 2015; 15(5): 1133-1140. doi:10.1016/j.spinee.2015.01.027
- 14. Edwards ST, Marino M, Solberg LI, et al. Cultural And Structural Features Of Zero-Burnout Primary Care Practices: Study examines features of primary care practices where physician burnout was reported to be zero. Health Affairs. 2021; 40(6): 928-936. doi:10.1377/hlthaff.2020.02391
- 15. Friedberg MW, Chen PG, Van Busum KR, et al. Factors affecting physician professional satisfaction and their implications for patient care, health systems, and health policy. Rand health quarterly. 2014; 3(4): 1.