MAYO CLINIC

# Disclosure of Industry Payments to Physicians: An Epidemiologic Analysis of Early Data From the Open Payments Program

Deborah C. Marshall, MAS; Madeleine E. Jackson, BA; and Jona A. Hattangadi-Gluth, MD


## Abstract

The Centers for Medicare and Medicaid Services' Open Payments program implements Section 6002 of the Affordable Care Act requiring medical product manufacturers to report payments made to physicians or teaching hospitals as well as ownership or investment interests held by physicians in the manufacturer. To determine the characteristics and distribution of these industry payments by specialty, we analyzed physician payments made between August 1, 2013, and December 31, 2013, that were publicly disclosed by Open Payments. We compared payments between specialty types (medical, surgical, and other) and across specialties within each type using the Pearson $\chi^2$ test and the Kruskal-Wallis test. The number of physicians receiving payments was compared with the total number of active physicians in each specialty in 2012. We also analyzed physician ownership interests. Allopathic and osteopathic physicians received 2.43 million payments totaling $475 million. General payments represented 90% of payments by total value ($430 million) (per-physician median, $100; interquartile range [IQR], $31-$273; mean ± SD, $1407±$23,766), with the remaining 10% ($45 million) as research payments (median, $2365; IQR, $592-$8550; mean ± SD, $12,880±$66,743). Physicians most likely to receive general payments were cardiovascular specialists (78%) and neurosurgeons (77%); those least likely were pathologists (9%). Reports of ownership interest in reporting entities included $310 million in dollar amount invested and $447 million in value of interest held by 2093 physicians. In conclusion, the distribution and characteristics of industry payments to physicians varied widely by specialty during the first half-year of Open Payments reporting.


 ■ Mayo Clin Proc. 2016;91(1):84-96

From the Department of Radiation Medicine and Applied Sciences, University of California, San Diego, La Jolla, CA (D.C.M., J.A.H.-G.); and University of California, San Diego School of Medicine, La Jolla, CA (D.C.M., M.E.J.).

The recently debuted Centers for Medicare and Medicaid Services' (CMS) Open Payments transparency program establishes a national database of industry payments to physicians and teaching hospitals.[1] Financial relationships between medical product manufacturers and physicians have long been a source of concern to patients and policymakers alike. These concerns have grown in recent years as research continues to show the ways in which these widely prevalent relationships[2] may affect treatment decisions and may drive health care costs due to inappropriate utilization.[3,4] In their report calling for broad transparency of industry-physician relationships, the Institute of Medicine "defines a conflict of interest as existing when an individual or institution has a secondary interest… that creates a risk of undue influence on decisions or actions affecting a primary interest (eg, the conduct of objective and trustworthy medical research). This definition frames a conflict of interest in terms of the risk of such undue influence and not the actual occurrence of bias."[3,p26] In many cases, industry-physician financial relationships, from transfers of value as small as a meal or gift to those for royalties and licensing fees, create a conflict of interest.[3-5]

As a result of concerns about these financial conflicts of interest, several legislative efforts have been made over the years to increase transparency with respect to industry-physician relationships. Before Open Payments implementation, several states enacted laws requiring various levels of disclosure of industry payments to



Mayo Clin Proc. ■ January 2016;91(1):84-96 ■ http://dx.doi.org/10.1016/j.mayocp.2015.10.016
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physicians,[6] including full transparency, disclosure to the state, compliance with professional guidelines,[7] and limits on gifts. However, only 8 states had such laws before Open Payments implementation.[6] In addition to these laws, several pharmaceutical and device manufacturers publicly disclosed payments, although with varying detail.[8] Kesselheim et al,[9] in their evaluation of Massachusetts physician payment transparency data, found wide variation among specialties. They speculated that there may be differences in industry incentive to engage in such relationships or that specialties may have differences in the acceptance of these relationships.

Federal policymakers have attempted to increase the transparency of industry-physician financial relationships, although attempts between 2002 and 2009 failed to gain enough support for the bills to pass.[10-12] Finally, in 2010, the Physician Payment Sunshine Act was signed into law as Section 6002 of President Obama's Patient Protection and Affordable Care Act,[13] leading to establishment of the Open Payments program. The stated goal of the Sunshine Act and Open Payments is to "shed light on the nature and extent of [industry-physician] relationships and … hopefully discourage the development of inappropriate relationships and help prevent the increased and potentially unnecessary health care costs that can arise from such conflicts."[1,p9549] The Open Payments data release was updated in December 2014 and includes 4.5 million records of $3.7 billion in total value for payments occurring between August 1, 2013, and December 31, 2013. These data, despite representing only 5 months of 2013, are the most comprehensive to date describing physician-industry relationships in the United States. Physician payments reported to Open Payments include payments of greater than $10 or $100 in aggregate annually (adjusted based on the consumer price index), with notable exceptions, including product samples, discounts, charity care, and patient educational materials.[1]

Much of the existing literature on the Open Payments program is speculative, published before availability of the data, but provides important insight into the possible uses and impact of the data. For example, Rosenthal and Mello[14] speculated on the use of Open Payments data by attorneys, insurance carriers, researchers, policymakers, and patients. The debate on the influence of conflicts of interest on physician decision making is ongoing,[14-16] with researchers acknowledging that there is little evidence to answer such questions. Analysis of these newly available data may bring a better understanding of the differences and commonalities between specialties in their relationships with industry. Such knowledge may help determine how to assess the appropriateness of these relationships and their effects on clinical practice and may help inform evidence-based advocacy efforts as ongoing federal transparency efforts shift the landscape of disclosure for physicians.

The purpose of this study was to characterize Open Payments program records of industry payments to physicians and determine how these payments vary by specialty. We hypothesized that there would be differences in the characteristics and distribution of payments by physician specialty.

## METHODS

The Open Payments database allows for physician-level industry payment calculations and aggregation for analysis of broader characteristics by specialty. We performed a retrospective analysis of the most recent (December 2014) publicly available release of Open Payments data on industry payments (>$10 or $100 in aggregate annually) to identified physicians made between August 1, 2013, and December 31, 2013. The CMS excludes resident and manufacturer employee physicians. The data released also include payments to teaching hospitals, but these are beyond the scope of this article. Payments to recipient physicians were available in identified and deidentified databases. Identified physician payments included records of payments or other transfer of value (physician payments) to a specific physician and included physician specialty designation. Recipient physicians include allopathic and osteopathic specialties and other practitioners designated as physicians by the CMS. We further limited this analysis to allopathic and osteopathic physician specialties that could be matched with the American Medical Association Physician Masterfile count of active physicians.[17] Data were aggregated by physician specialty type (medical, surgical, and other) and by specialty within each type.