2013

Distributions of Industry Payments to Massachusetts Physicians

Christopher Robertson
Boston University School of Law

The NEW ENGLAND JOURNAL of MEDICINE

Perspective

MAY 30, 2013

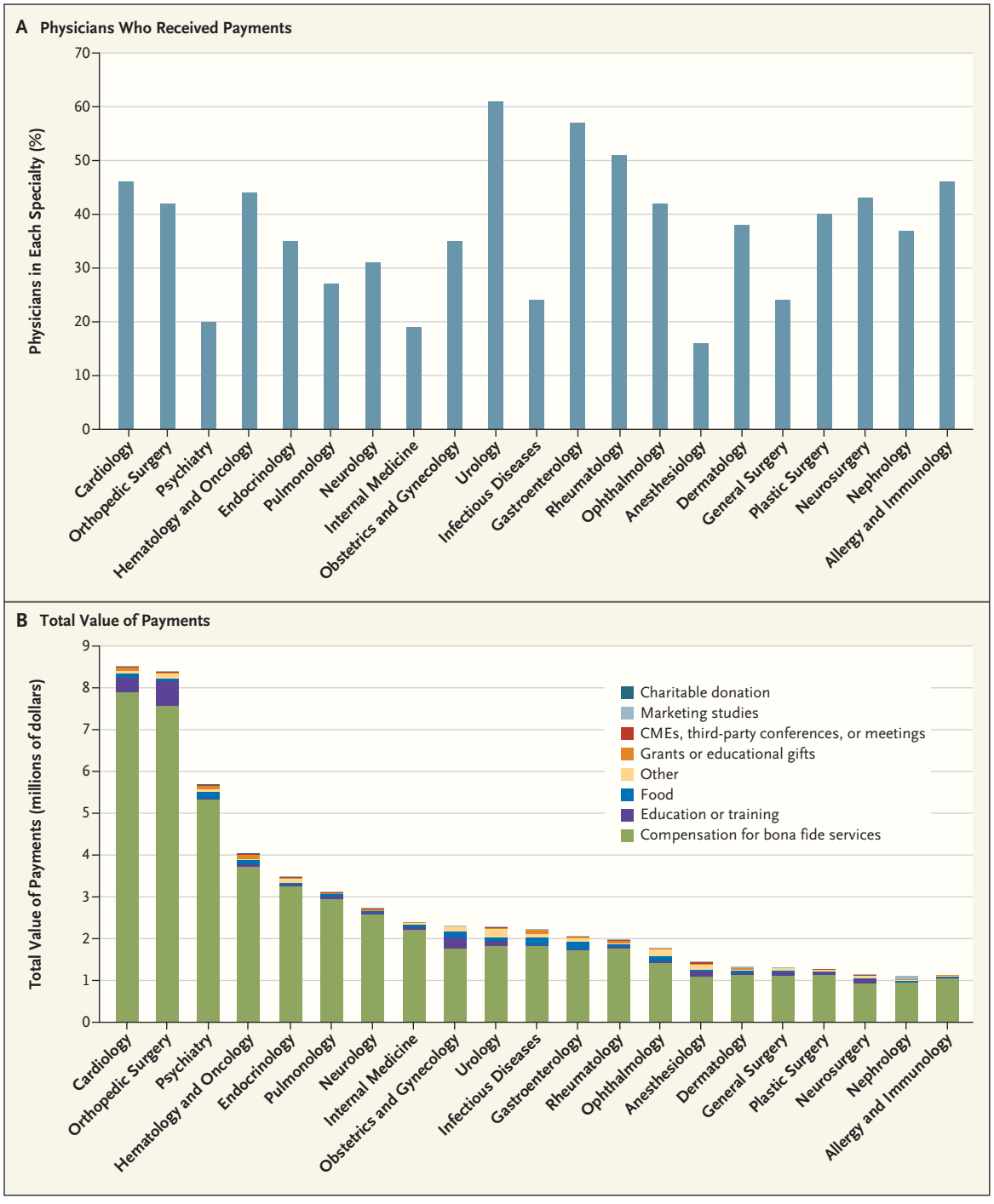
Distributions of Industry Payments to Massachusetts Physicians

Aaron S. Kesselheim, M.D., J.D., M.P.H., Christopher T. Robertson, J.D., Ph.D., Kent Siri, B.A., Puneet Batra, Ph.D., and Jessica M. Franklin, Ph.D.

Financial relationships between pharmaceutical manufacturers and health care professionals remain controversial. Some interactions, such as those involving research and exchange of expertise, promote the development and study of new drugs; by contrast, payments in the form of meals and continuing medical education (CME) programs have been criticized for being promotional and have been linked to non–evidence-based prescribing practices. The prevalence of these relationships has been estimated from national physician surveys, which found that, across seven specialties, about 83% of physicians received gifts from industry (excluding samples) in 2004. The prevalence has decreased slightly in recent years: a 2009 survey showed that about 71% of physicians received gifts. The numbers varied according to specialty, ranging from 62% in psychiatry to 68% in internal medicine to approximately 75% in cardiology and anesthesiology.[1]

In recent years, some states have implemented mandates requiring systematic public disclosure by industry of payments made to health care practitioners.[2] The 2009 Massachusetts Pharmaceutical and Medical Device Manufacturer Code of Conduct, for instance, required reporting of outlays with a value of at least $50. Databases such as the resulting Massachusetts one allow direct calculation of industry payments to physicians, comparisons with previous surveys, and evaluation of responses to trends in the marketplace.

We used Massachusetts data to characterize the distribution of payment types and the variation among medical specialties. We downloaded data from the Massachusetts Department of Health and Human Services,[3] which compiles information on payments of $50 or more reported by drug and medical device companies from July 2009 through December 2011 (the most current data available) and aggregates the payments made to each physician.[4] The data set lists the name, address, and professional license number of each physician, the manufacturer, and the amount and purpose of the payment. The purpose is categorized by the reporting company as one of the following eight types, with names and descriptors set by the state: compensation for bona fide services (including consulting and participation in speaker's bureaus); food; grants and educational gifts; CME pro-



Percentages of All Licensed Massachusetts Physicians in Each Specialty Who Received Payments (Panel A) and Total Value of Payments Received by Such Physicians, According to Specialty (Panel B), 2009–2011.

Data include only those specialties registering total payments of more than $1 million.

grams, third-party conferences, or meetings; education and training; marketing studies (payments in conjunction with research "other than genuine research"); charitable donations (excluding free samples); or "other." Finally, we matched each physician to a medical specialty using a publicly available data set managed by the state medical licensing board from February 2013 (his-

torical data were not available) and compared the distributions received by various specialties.

The 30 months' worth of data included 32,227 reported payments to 11,734 Massachusetts physicians, for a total of $76.7 million. Of those payments, $17.1 million occurred in the last 6 months of 2009, $30.3 million in 2010, and $29.3 million in 2011. In 2010, a total of 6530 physicians appeared in the database, as compared with 5921 in 2011. The average total payment per physician over the course of a year increased slightly, from $4,637 in 2010 to $4,944 in 2011.

The most common form of payment was food. During the 30 months, there were 14,251 payments for a total of $2.4 million (median, $100; interquartile range [IQR], $69–$164). The number of food payments shrank from 5253 in 2010 (for a total of $858,031) to 4131 in 2011 ($811,292). Compensation for bona fide services was the payment type with the highest value. The 8432 payments in this category accounted for $67.3 million, or 88% of total expenditures (median, $2,750; IQR, $1,000–$6,560). Such payments were made 3072 times in 2010, and the number remained stable in 2011 (2990).

When we analyzed the published Massachusetts data according to physicians' specialty distributions, we found that 25% of currently licensed Massachusetts physicians (8439 of 33,446) received at least one payment between July 2009 and December 2011. Primary care was among the specialties least likely to receive payments: the database contained payments to fewer nonspecialist internists (19%), pediatricians (12%), and family practitioners (21%) than urologists (61%), gastroenterologists (57%), rheumatologists (51%), and cardiologists (46%) (see graph).

The highest average per-physician amounts paid over the full 30-month period were received by orthopedic surgeons ($18,446) and physicians in various specialties within internal medicine, including endocrinology ($17,407), infectious diseases ($15,922), and pulmonology ($13,027). The distribution of types of financial relationships also varied among specialties. For example, compensation for bona fide services accounted for more than 90% of the payments for orthopedic surgeons, psychiatrists, and most internal medicine specialists, whereas general internists received larger shares of their payments in the form of food (8%) and grants or educational gifts (5%), and obstetricians received 11% of their total amounts as education or training. The prevalence of industry interactions varied widely among specialties — a finding that suggests either that industry has different incentives to engage in relationships with different types of specialists or that there are varying levels of acceptance of these interactions among practitioners in various fields.

Our analysis reveals decreases in overall payments and numbers of physicians appearing in the database between 2010 and 2011, with a slight increase in the average payment amount — when fewer physicians received payments from drug and device companies, the remaining financial relationships became a bit more lucrative. One explanation may be that relatively high proportions of physicians in Massachusetts are affiliated with academic medical centers and health systems that now have policies preventing physicians from accepting certain types of gifts of any value; institutions that have taken such actions include Boston University School of Medicine–Boston Medical Center (2007), the University of Massachusetts (2008), Partners HealthCare (2009), Tufts University School of Medicine (2010), and Harvard Medical School (2010). In addition, starting in July 2009, state law banned many types of gifts, including most meals. Accordingly, we found a decrease in the often-criticized provision of food but no reductions in payments categorized as compensation for bona fide services, which may be promotional in nature but may also be for exchanges of scientific expertise. The gift ban was recently repealed, and "modest" industry-sponsored "meals and refreshments" are now permitted — though no restrictive definitions are attached to these terms. It is likely, therefore, that the provision of food will once again increase.

The rates were substantially lower than those reported in previous national surveys that did not distinguish among gifts according to their value.[2] Though these surveys are older than our data set and were derived from national samples, one explanation for the discrepancy may be that Massachusetts physicians — particularly primary care physicians — receive many gifts valued at less than $50 that are not reported to the database. However, social science research suggests that feelings of reciprocity and changes in attitudes or behavior can be induced by even

small-value gifts.[5] The discrepancy between data sets also raises the possibility that some qualifying payments were not reported to the Massachusetts database.

The federal Physician Payment Sunshine Act will soon require manufacturers to report most payments to physicians and teaching hospitals on a national level. Recently released rules indicate the intent to create a searchable system that will include the names of drugs or devices related to the payment. Descriptors for the type of relationship will be included as well, although the ones currently used in Massachusetts are of limited value, since the dominant category of "compensation for bona fide services" encompasses legitimate scientific as well as more controversial marketing relationships. However, many types of indirect payments, such as those made through intermediary organizations that host CME conferences, will be exempt from the national reporting requirement — which raises the possibility of some undetected payments. Nonetheless, the transparency offered by state or federal disclosure databases could be used in the future to explore relationships between financial interactions and health care outcomes or costs.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

From the Division of Pharmacoepidemiology and Pharmacoeconomics, Department of Medicine, Brigham and Women's Hospital and Harvard Medical School (A.S.K., J.M.F.); and Kyruus (K.S., P.B.) — all in Boston; the Edmond J. Safra Center for Ethics at Harvard University, Cambridge, MA (A.S.K., C.T.R.); and the James E. Rogers College of Law, University of Arizona, Tucson (C.T.R.).

This article was published on May 1, 2013, at NEJM.org.

1. Campbell EG, Rao SR, DesRoches CM, et al. Physician professionalism and changes in physician-industry relationships from 2004 to 2009. Arch Intern Med 2010;170:1820-6. [Erratum, Arch Intern Med 2010;170:1966.]
2. Chimonas S, Rozario NM, Rothman DJ. Show us the money: lessons in transparency from state pharmaceutical marketing disclosure laws. Health Serv Res 2010;45:98-114.
3. Massachusetts Department of Health and Human Services. Data & reports (http://www.mass.gov/eohhs/gov/departments/dph/programs/hcq/healthcare-quality/pharm-code-of-conduct/data/).
4. KyruusOne Big Data Platform overview. Boston: Kyruus, 2012 (http://www.kyruus.com/static/media/uploads/library/Kyruus%20Platform%20-%20Data%20Platform%20Overview.pdf).
5. Dana J, Loewenstein G. A social science perspective on gifts to physicians from industry. JAMA 2003;290:252-5.

DOI: 10.1056/NEJMp1302723

Sunlight as Disinfectant — New Rules on Disclosure of Industry Payments to Physicians

Meredith B. Rosenthal, Ph.D., and Michelle M. Mello, J.D., Ph.D.

After extensive public comment, the Centers for Medicare and Medicaid Services (CMS) issued final regulations in February implementing the Physician Payments Sunshine Act, enacted as part of the Affordable Care Act.[1] The 287-page document details requirements for producers of drugs, biologics, devices, and medical supplies to disclose virtually all transfers of value to physicians and teaching hospitals. The provisions were intended to help patients make more informed decisions and to deter financial relationships that might inflate health care costs.[1] The rules go well beyond preexisting law but stop short of directly regulating financial relationships. Given that CMS projects compliance costs to industry of nearly $1 billion over 5 years, it is reasonable to ask what benefits disclosure is likely to bring.

Payment-reporting laws have been enacted in six states and vary in the scope of covered payers and providers, types and minimum value of reportable payments, and restrictions placed on permissible payments. Some laws have substantial shortcomings, and data from the states have not been widely shared with the public. The federal law rectifies these problems, requiring public disclosure and comprehensive, standardized payment reporting.

The new rules thus inject a welcome dose of sunshine — but will they have the intended effects? Both theory and evidence suggest that the benefits of disclosure are unlikely to be realized solely through environmental exposure of patients to this information. Activating "learned intermediaries," such as health insurers, however, could be a game changer.

Under the new rules, manufacturers must annually report transfers of value to licensed physicians or teaching hospitals exceeding $10 per instance or $100 per year, along with the recipient's identity and the purpose of the payment (see the Perspective article by