Impact of Pharmaceutical Marketing on Healthcare in the District of Columbia

LARGE PAYMENTS TO HEALTH CARE PROVIDERS IN THE DISTRICT OF COLUMBIA, 2014-2018



Government of the District of Columbia Department of Health Health Regulation and Licensing Administration

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DC HEALTH GOVERNMENT OF THE DISTRICT OF COLUMBIA COURSER, MAYOR



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Introduction

Pharmaceutical and medical-device manufacturers frequently make payments of various sizes to hospitals and physicians. These payments may be made in consideration of consulting services or speaking engagements, to defray the cost of educational activities, space rental, lodging, food and beverage, or for licenses and royalties, among others. They may also include gifts to prescribers.¹ While these payments may improve the knowledge and awareness about new therapies by health care professionals, they also may distort beliefs, treatment recommendations, and prescribing behaviors.² Between 1997 and 2016, medical marketing in the United States increased from \$17.7 to \$29.9 billion, and marketing to health care professionals constituted the largest category.³

A 2013 impact report found that pharmaceutical company gifts of any size to District of Columbia health care professionals were associated with increased prescriptions per patient, prescription costs, and brand-name prescriptions.⁴ In 2018, payments received by health care providers in the District of Columbia ranged from less than \$1 to over \$400,000.⁵ There is little systematic evidence that establishes the nature, form, and impact of large payments to individual physicians and hospitals. In a 2017 "Viewpoint" article in the Journal of the American Medical Association, researchers from the Greenwell Foundation raised the concern of large payments as a potential source of conflict of interest and pointed out that the Open Payments data base might be used to help answer this question.⁶

Using the Open Payments and AccessRx data bases, this report aims to summarize the data on payments of at least \$5,000 to health care providers in the District of Columbia. Large payments may heighten the recipient's commitment and sense of obligation. For their part, manufacturers may be under greater pressure internally to justify large payments and may track the impact of these payments more closely as a result. Repeated large payments may foster a sense of mutual dependence and reliance, which in time may offer greater potential to affect the recipient's priorities and behavior.

This report characterizes payments reported between January 1, 2014, the earliest full year, and December 31, 2018, the most recent full year for which data were available in the Open Payments data base. This five-year period allows for the robust identification of patterns in large payments and the detection of trends over time.

Data Sources and Methods

Open Payments Data

The District of Columbia's AccessRx Act of 2004 requires pharmaceutical companies to report marketing expenditures to the District of Columbia Department of Health (DC Health). DC Health has been collecting information on pharmaceutical marketing since 2007, and researchers at the George Washington University Milken Institute School of Public Health have analyzed this information for DC Health annually since that time.

To examine marketing expenditures, this report uses two sets of data: AccessRx and Open Payments. The Open Payments system requires companies across the country to report gifts to physicians and teaching hospitals. The Physician Payments Sunshine Act of 2010 established the national Open Payments system, and it requires all pharmaceutical and medical-device manufacturers to report payments to physicians and teaching hospitals to the Centers for Medicare and Medicaid Services (CMS). These data are available by year and jurisdiction. This report is based on Open Payments marketing data of payments made between January 1, 2014 and December 31, 2018 to physicians and teaching hospitals in the District of Columbia. Data from 2013 were only available for the second half of the year and therefore omitted from this analysis. The Open Payments program mandates that manufacturers report all "payments or other transfers of value made that are not in connection with a research agreement or research protocol".

Open Payments data, including physician names, are publicly available and were retrieved from this website: https://openpaymentsdata.cms.gov/. Payments to physicians and teaching hospitals are searchable online through Open Payments, allowing researchers to track patterns in gifts. Individual patients can see whether their physicians have accepted gifts from pharmaceutical companies.

AccessRx Data

While the Open Payments program only requires manufacturers to report gifts to physicians and teaching hospitals, the AccessRx program operated by DC Health captures more comprehensive information; it requires the reporting of gifts to all other licensed health care providers, including nurses, nurse practitioners, physician assistants, and pharmacists, as well as to non-teaching hospitals, health care staff, and organizations engaged in advocacy or clinical care.

Title III of the AccessRx Act of 2004 requires any "manufacturer or labeler of prescription drugs dispensed in the District that employs, directs, or utilizes marketing representatives in the District" to disclose, in an annual report to the District of Columbia Department of Health (DOH), expenses for marketing prescription drugs in the District. These expenditures include costs of direct promotion to District residents; costs of educational and informational sessions, gifts, and other marketing to healthcare professionals and entities licensed to provide care in the District; and costs associated with employees or contractors who directly or indirectly engage in these activities in the District.

Although AccessRx reports are publicly available, the names of prescribers, nurses, office staff, technicians, and other people or organizations that receive payments and other gifts are confidential. Manufacturer-level expenses on advertising, drugs reps, and other marketing personnel are also confidential. Details are available only to DC Health.

The AccessRx program operated by DC Health releases two reports annually. The expenditures report documents annual pharmaceutical marketing expenditures for gifts to physicians, other health care professionals, hospitals, and other organizations, advertising, and the salaries of detailers. The second report, Impact of Pharmaceutical Marketing on Healthcare in the District of Columbia, considers how pharmaceutical marketing may affect health and health care in the District.

Previous impact reports include:

- The Marketing and Prescribing of Hepatitis C Drugs in the District of Columbia (2019)
- The Marketing and Prescribing of Anticoagulants in the District of Columbia (2018)
- The High Cost of Highly Promoted Drugs in the District of Columbia (2017)
- Diabetes in the District of Columbia (2016)
- Reporting Changes and the Effect of Gifts on Prescribing Behavior (2015)
- Focus on Gifts to Organizations and Influential Physicians (2014)
- Focus on Use of Antipsychotics in Seniors (2013)
- Report on the Use of Antipsychotics in Children (2012)

Large Payments to Healthcare Providers in the District of Columbia

Distribution of Payment Amounts 2014-2018

Over the five-year period from January 1, 2014, to December 31, 2018, the Open Payments data base recorded a decrease in the total number of payments to recipients in the District of Columbia from 41,042 to 39,175 (Table 1).

Reported Value	2014	2015	2016	2017	2018	2014-18	2018*
\$1 - \$99	31,058	29,563	29,968	29,170	28,765	148,524	4,897
\$100 - \$999	6,765	7,401	7,278	7,152	7,243	35,839	2,815
\$1,000 - \$4,999	2,743	2,936	2,791	2,651	2,571	13,692	504
\$5,000 - \$9,999	274	366	346	428	430	1,844	43
\$10,000 - \$99,999	197	163	167	168	154	849	77
\$100,000 or More	5	6	11	8	12	42	13
Total	41,042	40,435	40,561	39,577	39,175	200,790	8,349

Table 1. Number of Payments by Reported Value and Year

Note: * based on AccessRx data. All other entries based on Open Payments data.

Nearly three quarters of all payments recorded in the Open Payments data base and nearly three out of every five payments recorded in the AccessRx data base fell into the smallest payment bracket, \$1 - \$99 (Table 2). Payments between \$100 and \$999 constituted the next largest group, at 17.8% and 33.7% in the Open Payments and AccessRx data bases, respectively.

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Reported Value	2014	2015	2016	2017	2018	2014-18	2018*
\$1 - \$99	75.7	73.1	73.9	73.7	73.4	74.0	58.7
\$100 - \$999	16.5	18.3	17.9	18.1	18.5	17.8	33.7
\$1,000 - \$4,999	6.7	7.3	6.9	6.7	6.6	6.8	6.0
\$5,000 - \$9,999	0.7	0.9	0.9	1.1	1.1	0.9	0.5
\$10,000 - \$99,999	0.5	0.4	0.4	0.4	0.4	0.4	0.9
\$100,000 or More	0.0	0.0	0.0	0.0	0.0	0.0	0.2

Table 2. Percentage of Number of Payments by Reported Value and Year

Note: * based on AccessRx data. All other entries based on Open Payments data.

Over the five-year period the total value of payments (unadjusted for inflation) increased by 16.6% from \$15.9 million to \$18.5 million (Table 3). Given the decrease in the number of payments, the average payment increased by 22.2% from \$387.30 in 2014 to \$473.36 in 2018, or about 4.1% per annum.

Reported Value	2014	2015	2016	2017	2018	2014-18	2018*
\$1 - \$99	728	703	721	714	682	3,548	201
\$100 - \$999	1,853	2,044	1,963	1,895	1,938	9,693	631
\$1,000 - \$4,999	6,138	6,818	6,748	6,720	6,589	33,013	1,027
\$5,000 - \$9,999	1,834	2,327	2,208	2,746	2,785	11,899	272
\$10,000 - \$99,999	4,025	3,670	3,757	3,628	3,600	18,680	2,304
\$100,000 or More	1,317	1,623	3,344	2,955	2,950	12,189	3,304
Total	15,896	17,185	18,741	18,657	18,544	89,023	7,739

Table 3. Value of Payments (Thousand Dollars) by Reported Value and Year

Note: * based on AccessRx data. All other entries based on Open Payments data.

More than one third of the value of payments was accounted for by payments in the \$1,000 - \$4,999 bracket.

Reported Value	2014	2015	2016	2017	2018	2014-18	2018*
\$1 - \$99	4.6	4.1	3.8	3.8	3.7	4.0	2.6
\$100 - \$999	11.7	11.9	10.5	10.2	10.5	10.9	8.2
\$1,000 - \$4,999	38.6	39.7	36.0	36.0	35.5	37.1	13.3
\$5,000 - \$9,999	11.5	13.5	11.8	14.7	15.0	13.4	3.5
\$10,000 - \$99,999	25.3	21.4	20.0	19.4	19.4	21.0	29.8
\$100,000 or More	8.3	9.4	17.8	15.8	15.9	13.7	42.7

Table 4. Percentage of Value of Payments by Reported Value and Year

Note: * based on AccessRx data. All other entries based on Open Payments data.

Trends in Large Payments

This report focuses on large payments, defined as transfers not connected to research that were valued by the reporting organization at \$5,000 or more.

Over the 2014-18 period, 2,735 payments of \$5,000 or more to recipients in the District of Columbia were reported to the Open Payments data base. Although these large payments only accounted for 1.3% of the total number of payments (Figure 1), they constituted 48.0% of the total value of payments.



Figure 1. Payments to Recipients in the District of Columbia, 2014, 2018

The percentage of large payments grew from 1.16% in 2014 to 1.52% in 2018, the largest increase being recorded for payments in the \$5,000 to \$9,999 range.

While large payments accounted for 50.3% of all 2018 payments reported to the Open Payments data base, large payments accounted for 76.0% of all 2018 payments reported to the AccessRx data base (Table 4).

Manufacturers Making Large Payments

Among payments of \$5,000 or more for which the associated product type was reported, devices comprised the most common category (Table 5). This product type was reported at least twice as often as drugs. Biologics and medical supply were reported less frequently.

	2016		2017		2018		
Rank	Product Type	N	Product Type	Ν	Product Type	N	
1	Device	272	Device	283	Device	277	
2	Missing	159	Missing	177	Missing	167	
3	Drug	70	Drug	113	Drug	104	
4	Biologic	23	Biologic	28	Biologic	47	
5			Medical Supply	3	Medical Supply	1	

Table 5. Number of Payments of at Least \$5,000 by Marketed Product Type and Year

Note: Product type was not reported in years 2014 and 2015.

During the 2014-18 time period, between 99 and 128 manufacturers reported at least one payment of at least \$5,000 to the Open Payments data base (Table 6). On average the top 20 manufacturers accounted for close to 60% of all large payments. The identities of these top 20 manufacturers varied little from year to year. Most manufacturers in this group were pharmaceutical manufacturers; a small number were medical-device manufacturers. Medtronic reported the largest number of large payments in every year during the observation period. The total value of its large payments to recipients in the District of Columbia totaled at least \$130,000 in each year. Five additional manufacturers (Sanofi, Pfizer, Stryker, Boston Scientific, Biogen) were ranked in the top 20 in every year of the reporting period.

	2014		2015		2016		2017		2018	
Rank	Company	Ν	Company	Ν	Company	Ν	Company	Ν	Company	N
1	MEDTRONIC	26	MEDTRONIC	47	MEDTRONIC	51	MEDTRONIC	42	MEDTRONIC	50
2	BENVENUE	23	LIFECELL	44	BOSTON SCIENTIFIC	30	ALIGN	29	STRYKER	38
3	SANOFI	19	BOSTON SCIENTIFIC	31	STRYKER	19	SANOFI	24	ALLERGAN	31
4	PFIZER	18	SANOFI	26	КСІ	18	STRYKER	23	КСІ	21
5	ASTRAZENECA	16	BENVENUE	24	AMGEN	17	ALLERGAN	22	BOSTON SCIENTIFIC	20
6	BIOHORIZONS	16	GILEAD	23	PFIZER	16	GLOBUS	18	ALIGN	18
7	ABBOTT	15	ABBOTT	22	SANOFI	15	KCI	17	SANOFI	15
8	LIFECELL	15	KARLSTORZ	20	ALLERGAN	15	MERCK	16	TAKEDA	14
9	KARLSTORZ	14	STRYKER	15	BAYER	14	BOSTON SCIENTIFIC	14	GENENTECH	14
10	STRYKER	14	PFIZER	13	GLOBUS	13	BAYER	13	ABBOTT	13
11	BOSTON SCIENTIFIC	14	СООК	12	KARLSTORZ	13	BIOTRONIK	13	ASTRAZENECA	13
12	TEVA	12	BIOGEN	11	LIFECELL	13	GENENTECH	13	MERCK	13
13	BIOGEN	12	W. L. GORE	10	BIOTRONIK	11	GILEAD	13	GSK	12
14	СООК	11	NOVARTIS	9	GSK	10	INTEGRA	12	INTEGRA	11
15	ST. JUDE MEDICAL	11	AMGEN	9	MERCK	10	BIOGEN	10	MERZ	11
16	GSK	11	ABBVIE	9	GALDERMA	9	TEVA	9	NOVO	10
17	INTUITIVE	9	NOVO	8	GILEAD	9	MILLENNIUM	8	BAYER	10
18	BOEHRINGER	9	GSK	8	AXOGEN	9	СООК	8	AMGEN	9
19	ALLERGAN	8	GLOBUS	8	BIOGEN	8	COVIDIEN	8	BIOGEN	7
20	DEVICOR	8	KCI	7	HALYARD	8	ABBOTT	8	PFIZER	7
	Тор 20	59%	Тор 20	67%	Тор 20	59%	Тор 20	53%	Тор 20	57%
	Number of Companies	107	Number of Companies	99	Number of Companies	113	Number of Companies	136	Number of Companies	128

Table 6. Number of Payments of at Least \$5,000 by Manufacturer and Year

Recipients of Large Payments

Clinical office staff received 65.4% of all payments of at least \$5,000 reported to the AccessRx data base and 85.8% of their value (Table 7).

Recipient Type	Number	Percentage of Total Number	Percentage of Total Value	Average Payment
Advanced Practice Nurses	1	3.8	1.6	6,646
Clinical Office Staff and Other	17	65.4	85.8	21,587
Nurses	1	3.8	1.5	6,600
Other Healthcare Providers*	2	7.7	3.1	6,545
Physicians	5	19.2	8.1	6,900

Table 7. Payments of at Least \$5,000 by Type of Individual Recipient, 2018 (AccessRx)

* This category includes social workers and psychologists.

Advocacy and clinical organizations as well as "other institutional recipients" accounted for nearly 90% of the number and value of all large payments to institutional recipients (Table 8). The average payment to a clinical organization was more than 2.5 times larger than the average payment to either of the other two major types of institutional recipients (advocacy organizations and institutional recipients not elsewhere classified).

Recipient Type	Number	Percentage of Total Number	Percentage of Total Value	Average Payment
Advocacy Organizations	29	27.1	19.8	37,303
Clinical Organizations	24	22.4	41.6	94,520
Continuing Medical Education	1	0.9	1.2	65,000
Other Institutional Recipients	43	40.2	28.3	35,947
Teaching Hospitals	1	0.9	0.2	10,000
Universities	9	8.4	8.8	53,515

Table 8. Payments of at Least \$5,000 by Type of Institutional Recipient, 2018 (AccessRx)

The share of large payments made to teaching hospitals declined from 35.1% in 2014 to 22.7% in 2018 (Table 9). The share of large payments received by individual physicians increased commensurately.

Recipient Type	2014	2015	2016	2017	2018	2014-18
Physician	64.9	71.2	68.9	76.3	77.3	72.1
Teaching Hospital	35.1	28.8	31.1	23.7	22.7	27.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 9. Percentage of Payments of at Least \$5,000 by Recipient Type and Year

The George Washington and Georgetown University Hospitals received by far the largest and second-largest number of payments, respectively, in each year of the reporting period (Table 10). Together these two teaching hospitals received about 9 out of every 10 large payments. The number of large payments received by Children's National Hospital, Howard University Hospital, Sibley Memorial Hospital, Providence Hospital, National Rehabilitation Hospital did not reach 10 in any year during the reporting period.

In 2018, the ten physicians who received the largest number of payments of at least \$5,000 accounted for 30% of all large payments received by physicians, down from 42% in 2014 (Table 11). Several physicians were in this group in consecutive years. In each year, the value of large payments received by the top physician was at least \$85,000. The value of large payments received by the physician ranked tenth was at least \$30,000.

Among the physician specialties identified by name in the Open Payments data base, individuals in the fields of internal medicine, surgery, orthopedic surgery, radiology, and psychology/neurology received the largest number of payments of at least \$5,000 (Table 12). A large proportion of large payments to physicians did not identify the medical specialty.

Table 10. Number of Payments of at Least \$5,000 by Teaching Hospital and Year

	2014 2015		2016		2017		2018			
Rank	Teaching Hospital	Ν	Teaching Hospital	N	Teaching Hospital	Ν	Teaching Hospital	N	Teaching Hospital	Ν
1	George Washington	104	George Washington	109	George Washington	104	George Washington	66	George Washington	99
2	Georgetown	48	Georgetown	33	Georgetown	44	Georgetown	63	Georgetown	23
3	Children's	6	Howard	6	Howard	8	Children's	7	Howard	7
4	Howard	6	Children's	5	Children's	6	Howard	6	Children's	4
5	Sibley Memorial	3	Nat'l Rehabilitation	1	Nat'l Rehabilitation	1	Providence	1	Sibley Memorial	2

Table 11. Number of Payments of at Least \$5,000 by Physician and Year

	2014		2015		2016		2017		2018	
Rank	Physician Name	Ν	Physician Name	Ν	Physician Name	Ν	Physician Name	Ν	Physician Name	Ν
1	W Olan	30	M Nahabedian	37	A Leonard-Segal	17	B Gray	17	M Nahabedian	22
2	A Leonard-Segal	17	W Olan	30	W Olan	15	W Yu	16	B Gray	18
3	R Brem	16	Z Younossi	18	J O'Brien	14	J O'Brien	16	A Shorr	16
4	H Jolson	16	A Leonard-Segal	16	M Nahabedian	13	P Cooper	14	W Yu	16
5	H Shafie	16	P Cooper	9	A Pichard	12	P Kim	14	P Kim	16
6	C Kessler	8	J O'Brien	8	I Ducic	9	D Vannostrand	14	W Olan	12
7	V Obias	7	A Pichard	8	M Desai	9	A Shorr	13	S Kalantar	11
8	A Unger	7	J Ammerman	8	P Cooper	9	W Olan	12	T Pittman	10
9	P Bhanot	6	G Mintz	7	R Rubin	8	W Hickory	12	P Cooper	10
10	C Tornatore	6	R Shin	6	C Kessler	8	J Simon	11	C Burgess	9
	Тор 10	42%	Тор 10	39%	Тор 10	32%	Тор 10	30%	Тор 10	30%

	2014		2015		2016		2017		2018	
Rank	Physician Specialty	N	Physician Specialty	N	Physician Specialty	N	Physician Specialty	N	Physician Specialty	Ν
1	Missing	170	Missing	154	Missing	163	Missing	144	Internal Medicine	145
2	Internal Medicine	107	Internal Medicine	97	Internal Medicine	123	Internal Medicine	126	Missing	135
3	Radiology	51	Surgery	89	Ortho Surg	52	Ortho Surg	65	Surgery	56
4	Psych/Neuro	24	Radiology	41	Surgery	45	Surgery	38	Ortho Surg	54
5	Ortho Surg	22	Ortho Surg	32	Radiology	26	Psych/Neuro	33	Psych/Neuro	39
6	Surgery	20	Psych/Neuro	18	Neurological Surgery	17	Radiology	31	Radiology	20
7	Dentist	18	Pediatrics	17	Psych/Neuro	15	Dentist	29	Dentist	19
8	Pediatrics	9	Neurological Surgery	13	Dermatology	12	Neurological Surgery	20	Podiatrist	18
9	Ob/Gyn	8	Specialist	12	Rehab	9	Nuclear Medicine	15	Dermatology	17
10	Colon & Rectal Surgery	7	Family Med	6	Pediatrics	8	Ob/Gyn	14	Neurological Surgery	13
	Тор 10	92%	Тор 10	90%	Тор 10	90%	Тор 10	85%	Тор 10	87%

Table 12. Percentage of Payments At Least \$5,000 by Physician Specialty and Year

In each year between 2014 and 2018, between 78.0% and 84.2% of all large payments were made to recipients with addresses in three zip codes, 20007, 20010, and 20037 (Table 13 and Figure 2).

	2014		2015		2016		2017		2018	
Rank	Zip Code	%	Zip Code	%	Zip Code	%	Zip Code	%	Zip Code	%
1	20010	31.1	20010	31.4	20007	33.0	20007	35	20007	35.4
2	20007	28.4	20007	29.7	20010	30.0	20010	23	20010	27.0
3	20037	20.8	20037	18.3	20037	21.6	20037	20	20037	21.8
4	20422	5.5	20015	4.5	20016	4.2	20016	7	20016	6.5
5	20036	4.4	20016	3.6	20036	1.9	20036	3	20036	2.0
6	20006	3.4	20036	3.6	20422	1.7	20008	2	20422	1.5
7	20060	1.5	20422	1.5	20006	1.5	20422	2	20060	1.3
8	20005	1.3	20001	1.5	20005	1.5	20017	1	20005	1.2
9	20016	1.3	20060	1.3	20060	1.5	20060	1	20003	1.0
10	20003	0.8	20003	1.3	20017	1.0	20006	1	20001	0.8

Table 13. Percentage of Payments of at Least \$5,000 by Zip Code and Year, 2014-18



Figure 2. Share of Payments of at Least \$5,000 by Zip Code of Recipient, 2014-18

Nature and Form of Large Payments

On average slightly more than one third of large payments reported to the Open Payments data base were characterized as consulting fees, one quarter as speaking fees, and about one in seven as grants. Between 2014 and 2018, the share of speaking fees, royalties, and licenses among large payments doubled, while the share of grants, payments for education and travel and lodging, and honoraria declined.

Nature of Payment	2014	2015	2016	2017	2018	2014-18
Charitable Contribution	1.1	0.4	0.6	0.5	0.5	0.6
Consulting Fee	37.0	32.9	32.8	37.1	34.6	34.9
Education	8.2	8.2	5.5	4.1	3.2	5.7
Food and Beverage	0.2	0.2	0.0	0.0	0.0	0.1
Gift	1.3	1.1	1.3	0.8	2.3	1.4
Grant	17.0	14.4	16.2	11.6	10.2	13.7
Honorarium	5.9	2.2	5.0	1.2	2.0	3.1
Ownership	0.2	0.2	0.6	0.3	0.5	0.4
Royalty or License	1.1	3.6	3.1	3.8	4.5	3.3
Space Rental	6.9	5.2	7.6	6.0	6.0	6.3
Speaking Fee	14.5	24.9	20.8	29.1	30.5	24.5
Travel and Lodging	6.7	6.7	6.5	5.5	5.5	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 14. Percentage of Payments of at Least \$5,000 by Nature of Payment and Year

Approximately 90% of all large payments were made in the form of cash or cash equivalent, approximately 9% were in-kind items and services, and approximately 1% consisted of stock or other forms of ownership interest.

Tuble 19. Ferentiage of Fayments of at Least \$5,000 by Form of Fayment and Fear									
Form of Payment	2014	2015	2016	2017	2018	2014-18			
Cash or cash equivalent	88.7	89.7	86.8	92.5	90.6	89.8			
In-kind items and services	10.9	10.3	12.6	6.5	8.1	9.5			
Stock or Other Ownership Interest	0.4	0.0	0.6	1.0	1.3	0.7			
Total	100.0	100.0	100.0	100.0	100.0	100.0			

Table 15. Percentage of Payments of at Least \$5,000 by Form of Payment and Year

Discussion

This report summarizes patterns and trends in large payments by pharmaceutical and medicaldevice manufacturers to individual and institutional recipients in the District of Columbia between 2014 and 2018.

Although 1.3% of all payments reported to the Open Payments data base for the five-year period were at least \$5,000, nearly one out of every two dollars (48.0%) was made as a "large payment".

Large payments were highly concentrated among zip codes and teaching hospitals, and to a lesser degree, manufacturers. More than three quarters of all large payments were made to recipients in three zip codes and two teaching hospitals received about 90% of all large payments to all teaching hospitals in the District. Twenty manufacturers accounted for 60% of all large payments.

Despite the development of new pharmaceutical products and medical devices during the fiveyear period, there was substantial continuity in the identities of the organizations that made and received the majority of large payments. Six manufacturers ranked among the top 20 payers and one physician ranked among the top 10 individual recipients in each of the five years of the reporting period.

The largest changes were observed in the reported nature of payment: Between 2014 and 2018, the share of payments classified as speaking fees, royalties, and licenses among large payments doubled, while the share of payments classified as grants, payments for education and travel and lodging, and honoraria declined. The share of the largest category, consulting fees, fluctuated slightly. It is conceivable that the shift to speaking fees reflects a revised assessment of manufacturers of their impact on health care professionals and organizations engaged in health care delivery.

The data do not identify the content or audience of speaking engagements nor do they specify the learning objectives of educational activities or the questions addressed in consulting projects. For this reason, it is difficult to attribute change in health care provider practice patterns to specific one-time or repeated payments. Moreover, many providers receive payments from more than one manufacturer, which may dilute the impact of any individual payment.

Recommendations

Align the AccessRx reporting guidelines to match the Open Payments program

The administrators of the AccessRx program should consider aligning the data collection formats and processes with those used in the Open Payments program so that data from both sources are comparable and complementary. The Open Payments program collects information on gifts to physicians and teaching hospitals, while the AccessRx program collects information on gifts to other health care providers and organizations.

By aligning the AccessRx reporting guidelines with those of the Open Payments program, the impact of marketing expenditures by pharmaceutical and medical-device manufacturers on the provision of health care services can be studied more comprehensively and on a larger scale.

Specifically, pharmaceutical manufacturers should be required to report the specific drug associated with each marketing expense to AccessRx. This addition will enable researchers to pinpoint the impact that gifts to all health care providers have on prescribing and practice patterns.

Create an all-payer claims database for the District of Columbia

The creation of an all-payer claims database would allow researchers to study rigorously if and how payments to health care professionals and health care delivery organizations impact the provision of medical care to residents in the District of Columbia. "All-payer claims databases (APCDs) are large State databases that include medical claims, pharmacy claims, dental claims, and eligibility and provider files collected from private and public payers."⁷ Currently, 19 states but not the District of Columbia have legislation in place to create and sustain an all-payer claims database.⁸

An APCD for the District of Columbia would allow researchers to detect changes in practice patterns after a given provider had received a payment identified in the Open Payments or AccessRx data base. Crucially, the APCD would allow researchers to create credible comparison groups and thus establish a causal link between payments and changes in care. Specifically, the collection of medical claims from all payers operating in the District would allow researchers to compare patterns of treating the medical conditions and patients who were expected to be most impacted by a payment to medical conditions and patients who were expected to be less impacted—both for the among the recipients of a payment and among near-identical health care providers that did not receive a payment.

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