

Appendix

Methods

The data not publicly released by the CMS consisted of de-identified or withheld data²⁰. De-identified data consisted of two groups: (1) records that could not be matched by CMS to a single doctor or teaching hospital because of inconsistent information, or (2) data that were not prepared in time to allow for a forty-five-day review period¹⁹. Data were withheld from the database for one of three reasons: (1) they were submitted after the deadline, (2) they were part of an unresolved dispute between the physician and manufacturer, or (3) the submitter requested that they be withheld because the payment pertained to development of a new drug, biologic, device, or medical supply¹⁹.

Results

In order, the top fifteen specialties by value were internal medicine, orthopaedic surgery, psychiatry and neurology, surgery, neurological surgery, family medicine, dentist, “specialists,” obstetrics and gynecology, urology, ophthalmology, dermatology, radiology, pediatrics, and anesthesiology. The assignment of “specialist” as a specialty was somewhat confusing so we attempted to clarify what group of physicians was included in this category. The category of specialist falls under “other service provider” in the OPD. Internet searches of physicians listed as specialists showed that the category contained physicians from multiple specialties ranging from neurology to plastic surgery. We suspect that the number of listed specialists will decline as more physicians register in the Open Payments system and correct any inaccuracy in their specialty assignment.

ORTHOPAEDICS AND THE PHYSICIAN PAYMENTS SUNSHINE ACT. AN
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TABLE E-1 Frequency of Specialty Assignments in Excluded Payments

Specialty	No. of Payments	% of All Excluded Payments
Anesthesiology	6628	1.4
Dentist	800	0.2
Dermatology	5717	1.2
Family medicine	64,650	13.3
Internal medicine	144,104	29.9
Neurological surgery	8610	1.8
Obstetrics and gynecology	5735	1.2
Ophthalmology	21,907	4.6
Orthopaedic surgery	6075	1.3
Pediatrics	9002	1.9
Psychiatry and neurology	68,129	12.9
Radiology	1395	0.3
Specialist	62,455	12.6
Surgery	7954	1.6
Urology	10,497	1.9
All others	67,565	14.0
Total	491,223	100.0

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TABLE E-2 Payments with a Possibility of Specialty Assignment Error Involving Orthopaedic Surgery*

Specialty	No. of Payments	% of All Excluded Payments
Ophthalmology	7868	39.3
Orthopaedic surgery	6075	30.2
All others	2086	10.3
Specialist	1838	9.1
Pediatrics	1148	5.7
Family medicine	355	1.8
Surgery	350	1.7
Internal medicine	161	0.8
Neurological surgery	138	0.7
Radiology	17	0.1
Obstetrics and gynecology	14	0.1
Urology	11	0.1
Anesthesiology	10	0.1
Dermatology	8	0.0
Dentist	5	0.0
Psychiatry and neurology	5	0.0
Total	20,089	100.0

*In all, we identified 2002 physicians who were categorized as orthopaedic surgeons in at least one payment but had received different specialty assignments in other payments. These 2002 physicians received 20,089 payments; the other specialties they were assigned to in these payments are shown in the table.

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TABLE E-3 Values of Excluded Payments*

Specialty	Total No. of Payments	Value of Payments					
		Total (\$)	% of Total	Mean (\$)	Median (\$)	Min. (\$)	Max. (\$)
Orthopaedic surgery	6075	5,621,851	8.5	931.39	27.65	0	323,337
Anesthesiology	6628	863,136	1.3	130.54	14.56	0	41,731
Dentist	800	411,035	0.6	529.68	43.09	2	55,555
Dermatology	5717	864,545	1.3	151.38	17.59	0	10,083
Family medicine	64,650	1,989,651	3.0	31.45	13.04	0	8000
Internal medicine	144,104	15,504,826	23.5	109.24	14.71	0	1,091,081
Neurological surgery	8610	3,076,666	4.7	358.00	19.93	0	543,286
Obstetrics and gynecology	5735	812,313	1.2	141.99	15.00	0	337,085
Ophthalmology	21,907	4,213,649	6.4	192.66	17.23	0	124,283
Pediatrics	9002	1,162,855	1.8	129.84	14.81	0	150,000
Psychiatry and neurology	68,129	9,501,076	14.4	154.94	15.01	0	65,987
Radiology	1395	375,438	0.6	272.65	22.32	0	20,000
Specialist	62,455	8,640,643	13.1	144.64	15.67	0	150,000
Surgery	7954	2,132,321	3.2	273.16	23.25	0	125,221
Urology	10,497	1,044,784	1.6	118.70	16.49	0	22,000
All others	67,565	9,672,717	14.7	145.18	15.90	0	181,103
Overall	491,223	65,887,505		138.67	15.00	0	1,091,081

*The physicians in this data set did not have consistently assigned specialties.

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TABLE E-4 Values of All Payments Including Potentially Misattributed Payments

Specialty	Total No. of Payments	Value of Payments					
		Total (\$)	% of Total	Mean (\$)	Median (\$)	Min. (\$)	Max. (\$)
Orthopaedic surgery	80,173	106,784,929	23.2	1340.21	37.13	0	2,149,728
Anesthesiology	36,501	5,835,541	1.3	160.15	15.90	0	165,015
Dentist	55,262	11,043,598	2.4	203.24	35.43	0	250,000
Dermatology	52,831	7,217,755	1.6	136.76	16.79	0	22,000
Family medicine	448,225	13,112,073	2.8	29.82	12.94	0	43,215
Internal medicine	1,045,072	138,516,779	30.1	134.75	15.02	0	1,091,081
Neurological surgery	26,012	15,848,473	3.4	615.00	26.25	0	543,286
Obstetrics and gynecology	82,076	8,989,629	2.0	110.13	16.00	0	337,085
Ophthalmology	56,072	10,926,447	2.4	195.13	17.48	0	193,073
Pediatrics	56,115	6,787,779	1.5	121.94	15.56	0	167,265
Psychiatry and neurology	262,348	39,406,069	8.6	168.98	17.11	0	207,500
Radiology	20,959	6,050,488	1.3	307.22	22.44	0	346,371
Specialist	85,421	17,559,919	3.8	217.74	16.33	0	1,113,684
Surgery	69,621	19,710,391	4.3	285.76	24.59	0	2,304,060
Urology	82,818	8,429,925	1.8	136.96	16.94	0	250,840
All others	237,509	44,149,606	9.6	188.29	17.83	0	717,065
Overall	2,697,015	460,369,403		176.49	15.47	0	2,304,060