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Authors

Bhattacharyya, Neil
Lin, Harrison W

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Characteristics of Otolaryngology Claims to Medicare in 2012

Neil Bhattacharyya, MD¹, and Harrison W. Lin, MD²

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Abstract

The Medicare provider utilization and payment public use datafile for 2012 was analyzed with respect to otolaryngology specialty providers to characterize otolaryngology services billed to and reimbursed by Medicare, both overall and according to provider characteristics. Among 8450 otolaryngology specialty providers submitting claims, the top 5 billed services were (count in millions): 99213 (2.23), 95165 (1.81), 99203 (0.92), 99214 (0.83), and 69210 (0.71), and the top 5 total reimbursed services were (aggregate total reimbursements in millions): 99213 (\$114), 99203 (\$68), 99214 (\$63), 31231 (\$60), and 31575 (\$47). There was a mean of 1567 services billed per provider with an average (yearly) total reimbursement from Medicare of \$76,068 per provider. These data characterize the current level of provision of otolaryngology services to the Medicare population.

Keywords

otolaryngology, Medicare, claims, provider utilization, provider payment

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Introduction

In April 2014, the Centers for Medicare Services (CMS) allowed for the unprecedented release of physician-level data regarding claims filed with and reimbursements provided from the Medicare program. A vast amount of data was released to the general public, much to the dismay of the health care community.^{1,2} Despite criticism and protests from organized medicine, including the American Medical Association,³ these data are now available for public scrutiny. We analyzed the Medicare physician payment data release for claims filed in 2012 with respect to the services provided for and billed by otolaryngology providers.

Methods

The Provider Utilization and Payment Data Physician and Other Supplier Public Use File released in April 2014 covering the calendar year 2012 with 100% final action (ie, all claim

adjustments have been resolved) physician/supplier Part B noninstitutional line items for the Medicare fee-for-service population was extracted and examined. This file contains provider name, credentials, gender, complete address, as well as other demographic information including provider specialty. Data were extracted into SPSS version 22.0, restricting the provider specialty to otolaryngology. This study protocol received Partners Healthcare review board exemption.

Data were then analyzed and cross-tabulated in 2 forms. First, the overall tabulation of Health Care Procedure Coding System (HCPCS) codes was conducted for otolaryngology as a whole. HCPCS codes submitted by otolaryngology were tabulated and ranked according to frequency of provision and according to overall dollars reimbursed. Next, the services provided according to HCPCS code were tabulated on a per provider basis. For each otolaryngology provider and for each HCPCS code, the number of services (including evaluation and management) billed was tabulated along with the average Medicare reimbursement specific to that code specific to that provider.

The total number of services provided and total reimbursement from Medicare were computed for each provider and descriptive statistics were obtained. Additionally, mean total services per provider for a several specific representative evaluation and management codes and common outpatient procedure codes were also computed.

Results

Based on physician specialty listing, there were 8450 unique otolaryngology providers submitting claims to CMS according to National Provider Identifier. There were 7433 male and 1017 female providers. The top 15 services billed to Medicare by volume are listed in **Table 1**. The top 15 services by overall reimbursement are listed in **Table 2**. Supplemental Figure S1 (available at www.otojournal.org) presents the mean total Medicare payments per provider according to the provider's state of residence.

¹Department of Otolaryngology & Laryngology, Harvard Medical School, Boston, Massachusetts, USA

²Department of Otolaryngology—Head & Neck Surgery, University of California, Irvine, Irvine, California, USA

Corresponding Author:

Neil Bhattacharyya, MD, Division of Otolaryngology, 45 Francis Street, Boston, MA 02115, USA.
Email: neiloy@massmed.org

Table 1. Top 15 Services Provided by Otolaryngology to Medicare by Number of Services Performed.

HCCPS Code	HCCPS Description	Number of Services Performed
99213	Office/outpatient visit est	2,232,810
95165	Antigen therapy services	1,813,224
99203	Office/outpatient visit new	915,528
99214	Office/outpatient visit est	828,757
69210	Remove impacted ear wax	707,046
95004	Percut allergy skin tests	663,420
31575	Diagnostic laryngoscopy	549,315
99212	Office/outpatient visit est	468,493
95117	Immunotherapy injections	461,236
31231	Nasal endoscopy dx	400,969
92557	Comprehensive hearing test	382,551
99204	Office/outpatient visit new	356,976
95024	Id allergy test drug/bug	348,847
92567	Tympanometry	266,447
95115	Immunotherapy one injection	251,365

Abbreviation: HCCPS, Health Care Procedure Coding System.

Table 2. Top 15 Services Provided by Otolaryngology to Medicare by Total Payments.

HCCPS Code	HCCPS Description	Total Payments
99213	Office/outpatient visit est	\$113,704,751
99203	Office/outpatient visit new	\$67,944,451
99214	Office/outpatient visit est	\$62,992,999
31231	Nasal endoscopy dx	\$60,386,357
31575	Diagnostic laryngoscopy	\$47,169,019
99204	Office/outpatient visit new	\$41,721,954
69210	Remove impacted ear wax	\$25,375,279
95165	Antigen therapy services	\$16,329,534
99212	Office/outpatient visit est	\$13,872,201
92557	Comprehensive hearing test	\$11,267,563
31237	Nasal/sinus endoscopy surg	\$11,217,620
31579	Diagnostic laryngoscopy	\$8,733,786
99202	Office/outpatient visit new	\$6,211,859
70486	Ct maxillofacial w/o dye	\$5,634,510
92511	Nasopharyngoscopy	\$4,823,890
99215	Office/outpatient visit est	\$4,468,833

Abbreviation: HCCPS, Health Care Procedure Coding System.

With respect to individual providers, each provider submitted, on average, 1567 services for billing to Medicare (95% confidence interval [CI], 1518-1616 services; median, 931 services; range, 11-41,817 services) with an average provider reimbursement of \$76,068 for the 12-month period (95% CI, \$74,260-\$77,876). The reimbursement range for individual otolaryngology providers was \$94.00 to \$2.12 million with a median reimbursement of \$55,353. **Table 3** presents the average number of services provided to Medicare

Table 3. Mean Number of Common Outpatient Services Billed by Otolaryngology to Medicare Per Provider.

Service	Mean	Standard Deviation
EM99201	1.0	9.1
EM99202	15.1	40.0
EM99203	108.3	105.9
EM99204	42.2	64.5
EM99205	3.1	15.3
EM99211	2.2	20.4
EM99212	55.4	113.5
EM99213	264.2	283.2
EM99214	98.1	166.0
EM99215	5.1	30.2
P31231	47.5	114.5
P31237	4.4	18.9
P69210	83.7	153.4
P31575	130.0	163.5
P30901	3.2	8.9
P30903	1.3	6.5

Abbreviations: EM, evaluation and management; P, procedure.

beneficiaries for common outpatient services including evaluation and management codes. Notably, as expected, no services for evaluation management codes 99241-99245 were provided as these codes are not recognized as billable codes by CMS (an internal consistency check).

Discussion

There is, without a doubt, an increased desire for transparency in the health care marketplace. Factions in the legislative, employer, patient advocacy, and organized medicine arenas have disputed many of the operational aspects of this increased transparency, but the public's demand for increased information, especially with respect to charges and payments have accelerated these processes. The Obama administration, in an effort to increase transparency, released the 2012 Medicare data in April 2014 in just such an accelerated manner without substantial external review.

The Medicare data do provide unique insight into the provision of health care services at the physician level. Interestingly, the number of services provided and the average reimbursement provided by Medicare to individual providers in the 12-month period remained within a rather tight confidence interval. Nonetheless, there were a number of outliers as indicated by the range of mean total reimbursement for providers. In fact, 6 providers received total reimbursements from CMS of greater than \$1 million, and 116 billed more than 10,000 total services. The fact that for both total number of services and total reimbursement the median was significantly lower than the mean indicates that there is a relative concentration in Medicare services among a relative minority of providers.

It should be noted that Medicare data are not representative of the US population as a whole, nor are the billings by

physicians to Medicare representative of health care provision to the overall American population. Otolaryngologists see a wide range of age groups with otolaryngologic afflictions including the Medicare population. Differences in providers' services to and reimbursements from the Medicare population are dependent on many factors, including the age distribution of patients in the providers' community, insurance coverage factors, and disease prevalence rates among different age groups within those community areas. However, the Medicare data do offer an insight at the macroscopic level as to otolaryngologic care provided to the Medicare population. Future studies on patterns of care will become feasible as likely more Medicare data are released to the public. Otolaryngologists should keep themselves apprised of these data and where they stand with respect to their Medicare services and reimbursements as it is very likely that the public and other individual groups concerned with health care are almost certainly doing the same.

Author Contributions

Neil Bhattacharyya, conception or design of the work; acquisition, analysis, or interpretation of data for the work; drafting the work and revising it critically; final approval of the version to be published; agreement to be accountable for all aspects of the work; **Harrison W. Lin**, analysis, or interpretation of data for the work; drafting the work and revising it critically; final approval of the

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Disclosures

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Supplemental Material

Additional supporting information may be found at <http://otojournal.org/supplemental>.

References

1. Stuart C. Public release of physician payments: chaos or clarity? <http://www.cardiovascularbusiness.com/topics/healthcare-economics/public-release-physician-payments-chaos-or-clarity>. Accessed May 4, 2014.
2. Dunlap R. Medical society chief: medicare "data dump" unfair to docs. <http://commonhealth.wbur.org/2014/05/medicare-data-dump-mass-medical>. Accessed May 4, 2014.
3. Dee Hoven A. AMA statement on CMS' Medicare data release. <http://www.ama-assn.org/ama/pub/news/news/2014/2014-04-09-ama-statement-cms-medicare-data-release.page>. Accessed May 4, 2014.