MARYLAND
Department of Health

Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Robert R. Neall, Secretary

May 3, 2018

The Honorable Thomas M. Middleton
Chair
Senate Finance Committee
3 East Miller Senate Office Bldg.
Annapolis, MD 21401-1991

The Honorable Shane E. Pendergrass
Chair
House Health and Government Operations Committee
241 House Office Bldg.
Annapolis, MD 21401-1991

RE: HB 70 – DHMH – Commissions, Programs and Reports – Revision (Ch. 656 of the Acts of 2009), and Health – General § 15-103.5 and Insurance Article § 19-807(d)(2)

Dear Chair Middleton and Chair Pendergrass:

In 2009, the General Assembly passed HB 70 – *Commissions, Programs and Reports – Revision* (Ch. 656 of the Acts of 2009), which consolidated two physician fee reporting requirements for the Medical Assistance Program. The Department of Health and Mental Hygiene is now required to submit a single report on physician fee issues to the legislature by January 1 each year.

The enclosed report includes a review of the rates paid to providers under the federal Medicare fee schedule and a comparison of those rates to the fee-for-service rates paid to similar providers for the same services under the Medical Assistance program and the rates paid to managed care organization providers for the same services; whether the fee-for-service rates and MCO provider rates will exceed the rates paid under the Medicare fee schedule; an analysis of other states' rates compared to Maryland; the schedule for raising rates; and an analysis of the estimated cost of implementing these changes.

If further information on this subject is required, please contact Webster Ye, Deputy Chief of Staff, at (410) 260-3190 or webster.ye@maryland.gov.

Sincerely,

Robert R. Neall
Secretary

Enclosure

cc: Edward J. Kasemeyer, Chair, Senate Budget and Taxation Committee
Maggie McIntosh, Chair, House Appropriations Committee
Sarah Albert, MSAR #7893 and #7417

Report on the Maryland Medical Assistance Program and the Maryland Children's Health Program – Reimbursement Rates Fairness Act

Submitted by the Maryland Department of Health

May 2018

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January 2018

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I. Introduction

Pursuant to SB 481 (Chapter 464 of the Acts of 2002), the Maryland Department of Health (the Department) established an annual process to set the fee-for-service (FFS) reimbursement rates for Maryland Medicaid and the Maryland Children's Health Insurance Program (CHIP) (together referred to as Maryland Medical Assistance) in a manner that ensures provider participation in the programs. The law further stipulates that, in developing the rate-setting process, the Department should take into account community reimbursement rates and annual medical inflation or utilize the Resource-Based Relative Value Scale (RBRVS) methodology and American Dental Association Current Dental Terminology (CDT-3) codes to set the Medicaid fee schedule. The RBRVS methodology is used by the Centers for Medicare & Medicaid Services (CMS) for the Medicare fee schedule.[1]

The law also directed the Department to submi an annual report to the Governor and various state House and Senate committees, addressin the following:

- The progress of the rate-setting proces
- A comparison of Maryland Medicaid's reimbursement rates with those of other states
- The schedule for adjusting Maryland's reimbursement rates to a level that ensures provider participation in the Medicaid program; and
- The estimated costs of implementing the above schedule and proposed changes to the FFS reimbursement rates

In addition, Section 15 of HB 70 (Chapter 656 of the Acts of 2009) requires the Department to review the rates paid to providers under the federal Medicare fee schedule and compare them with the FFS rates for the same services paid to providers under the Maryland Medical Assistance program and within managed care organizations (MCOs). On or before January 1 of each year, the Department must report this information and determine whether the FFS rates and MCOs' provider rates will exceed the rates paid under the Medicare fee schedule. This report satisfies these requirements.

II. Background

In September 2001, in response to HB 1071 (Chapter 702 of the Acts of 2001), the Department prepared its first annual report analyzing the physician fees paid by Maryland Medicaid and CHIP. In 2002, SB 481 required the submission of this report on an annual basis. This is the seventeenth annual report.

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[1] The RBRVS methodology relates payments to resources that physicians use and the complexity of the services they provide. See Appendix A for a more detailed description of the RBRVS methodology. The Department used this methodology as a benchmark, or point of reference, when it increased physician fees in fiscal years 2003 and 2006–2009, and subsequently in fiscal years 2013 – 2017.

The Department's first annual report showed that Maryland Medicaid's reimbursement rates in 2001 were, on average, approximately 36 percent of Medicare rates. Results from an American Academy of Pediatrics study from 1998–1999 included in the report showed that Maryland's physician reimbursement rates for a subset of procedures ranked 47th among all Medicaid programs in the country. Based on the 2001 report, the Governor and the state legislature allocated $50 million in additional total funds ($25 million state general funds) to increase physician fees in the Medicaid program beginning July 2002. The increase targeted evaluation and management (E&M) procedure codes, which are used by both primary care and specialty care physicians.

SB 836 (Chapter 1 of the Acts of 2005) allocated funds to the Maryland Medical Assistance program to increase both FFS physician reimbursement rates and capitation payments to MCOs to enable them to raise their physician fees.[2] The legislation also allocated $15 million in additional state funds ($30 million total funds) in fiscal year (FY) 2006 to increase fees for procedures commonly performed by obstetricians, neurosurgeons, orthopedic surgeons, and emergency medicine physicians. The legislation increased the fees for these physician specialties in response to the substantial rise in their malpractice insurance premiums.

SB 836 also created the Maryland Health Care Provider Rate Stabilization Fund (the Fund), which is administered by the Maryland Insurance Commissioner. The Fund was established in part to increase and maintain prior increases in physician fees through the Maryland Medical Assistance program. The Fund's primary revenues are derived from a tax imposed on MCOs and health maintenance organizations (HMOs). Table 1 shows the amounts of Rate Stabilization Funds that were used to increase and maintain prior increases in physician fees from FY 2006 – FY 2009.

Table 1. Rate Stabilization Funds Used to Increase and Maintain Physician Fees, FY 2006 – FY 2009 (Million Dollars)

	2006	2007	2008	2009
State Rate Stabilization Funds	$15.0	$28.8	$47.5	$67.1
Federal Matching Funds	$15.0	$28.8	$47.5	$67.1
Total Funds	**$30.0**	**$57.6**	**$95.0**	**$134.3**
Funds to Maintain Prior Fee Increases	$0.0	$32.4	$62.2	$102.6
Remaining Funds for Fee Increases	**$30.0**	**$25.2**	**$32.8**	**$31.7**

Finally, SB 836 requires the Department to consult with the MCOs that participate in the HealthChoice program, the Maryland Hospital Association, the Maryland State Medical Society (MedChi), the Maryland Chapter of the American Academy of Pediatrics, the Maryland Chapter of the American College of Emergency Physicians, the Maryland State Dental Association, and

[2] To ensure that the MCOs use increased capitation payments to raise their physician fees, the Department requires MCOs to pay their network physicians at least 100 percent of the Medicaid physician fee schedule.

the Maryland Dental Society to determine the new payment rates each year. These organizations are collectively referred to as stakeholders in this report.

For FYs 2007 and 2008, based on stakeholders' recommendations, the Department increased fees for procedures in different specialties, as shown in Table 2. In addition, procedures with the lowest fees were raised to a minimum of 50 percent of Medicare fees in FY 2008. Subsequently, the Department implemented other fee changes for FY 2009. In previous years, the fees for many specialties, including orthopedics, gynecology/obstetrics, neurosurgery, otorhinolaryngology (ENT), and emergency medicine were set at 100 percent of their corresponding Medicare fees. Medicare fees in general had not increased substantially. However, updates in relative value units (RVUs) led to decreases in Medicare fees for many procedures, which resulted in Maryland Medicaid fees for some of these procedures exceeding Medicare fees. At the same time, Medicaid fees for other procedures remained at 50 percent of Medicare fees. Therefore, based on stakeholders' recommendations, the Department increased the lowest Medicaid fees and re-balanced Medicaid fees that were higher than their corresponding Medicare fees.

Furthermore, separate fees for different sites of service were established in FY 2009 so that Medicaid fees would have site-of-service differentials for facilities and non-facilities. "Facilities" include inpatient hospitals, skilled nursing facilities or long-term care facilities, and other medical care facilities, whereas "non-facilities" include physician offices and homes of patients. Medicaid fees that were higher than their corresponding Medicare fees were reduced to the Medicare fee levels by site of service, and the lowest fees were raised to 79 percent of their corresponding Medicare fees by site of service.

The Department used the Medicare fee schedule as a benchmark, or point of reference, when it increased physician fees in fiscal years 2003 and 2006 – 2009. Table 2 shows the percentage of Medicare fees for targeted groups of procedures at the time of fee increases in FYs 2003 and 2006 – 2009.

Table 2. Prior Fee Increases to Percentage of Medicare Fees (FYs 2003 and 2006 – 2009)

Fiscal Year	Procedure Code Group	Percent of Medicare Fees at Time of Fee Increase
2003	Evaluation & Management (99201-99499)	80%
2006	Orthopedics (20000-29999)	100%
	Gynecology/Obstetrics (56405-59899)	100%
	Neurosurgery (61000-64999)	100%
	Emergency Medicine (99281-99285)	100%
2007	Anesthesia (00100-01999)	100%
	General Surgery (10000-19396)	80%
	Digestive System (40490-49905)	80%
	ENT (69000-69990, 92502-92700)	100%
	Radiation Oncology (77261-77799)	80%
	Allergy/Immunology (95004-95199)	80%
	Dermatology (96900-96999)	80%
2008	Evaluation & Management (99201-99499)	80%
	Evaluation & Management in hospital outpatient departments	50%

Fiscal Year	Procedure Code Group	Percent of Medicare Fees at Time of Fee Increase
	Neonatology (99294, 99296, 99299)	90%
	Radiology (70010-79900, excluding 77261-77799)	53%
	Vaccine Administration	66%
	Psychiatry (90801-90911)	61%
	Floor for the lowest fees	50%
2009	Set separate fees for facilities and non-facilities	
	Floor for the lowest fees	79%
	Orthopedics (20000-29999)	100%
	Gynecology/Obstetrics (56405-59899)	100%
	Neurosurgery (61000-64999)	100%
	Emergency Medicine (99281-99285)	100%

III. Physician Fee Changes in FYs 2010 – 2017

Physician Fees for FY 2010

The national economic recession reduced state revenues in FY 2010 necessitating an $11 million reduction in physician fee payments. Customized reductions were made to some codes, whereas most other procedures were subject to a 6 percent cut. Certain procedure codes and specialties (i.e., orthopedics, gynecology/obstetrics, neurosurgery, and emergency medicine) were excluded from the reduction in fees. In FY 2010, $112 million ($228 million with matching federal funds) was allocated from the Fund to maintain prior fee increases.

Physician Fees for FY 2011

The Medicare program regularly updates RVUs for procedures, resulting in fee *increases* for some procedures and fee *decreases* for other procedures. The Department compared the Maryland Medicaid fee for each procedure with its corresponding Medicare fee and then reduced fees for procedures that exceeded Medicare fees to the Medicare fee levels. Aside from these adjustments, the Department maintained FY 2011 physician fees at the same level as FY 2010 fees. In FY 2011, $118 million from the Fund ($239 million with matching federal funds) was allocated to maintain prior fee increases.

Physician Fees for FY 2012

The Department implemented a $6.5 million total funds reduction in payments for physician services for FY 2012. Some groups of procedure codes were excluded from the reduction in fees, including:

1. Fees for the four specialties mentioned in SB 836 (orthopedics, obstetrics/gynecology, neurosurgery, and emergency medicine) were maintained at a maximum of 100 percent of Medicare fees, with no increase in fees.
2. Four obstetric (delivery) procedures, three neonatal intensive care unit procedures, and 22 procedure codes used by educational institutions were maintained at their original FY 2011 levels.

Then, an across-the-board one percent reduction in fees was applied to all remaining procedures to achieve the required reduction in FY 2012 payments. Overall, fees were reduced from an average of 75 percent to an average of 74 percent of Medicare 2011 fees. In FY 2012, $104 million from the Fund ($212 million with matching federal funds) was allocated to maintain prior fee increases.

Physician Fees for CYs 2013 and 2014

There were no changes in Maryland Medicaid physician fees for the first six months of FY 2013. Under the Affordable Care Act (ACA), the federal government paid for increasing Medicaid payment rates in Medicaid FFS program and MCOs for E&M and vaccine administration procedures provided by primary care physicians (PCPs) to 100 percent of the Medicare payment rates for calendar years (CYs) 2013 and 2014. For services provided between January 1, 2013, and December 31, 2014, states received 100 percent federal financing for increasing payment rates for physicians who self-attested that they were PCPs.

However, Maryland Medicaid allows patients who have medically complex conditions to select specialists to serve as their PCPs. In order to improve access to primary care and specialists physicians, the fees for E&M procedures were increased for *all* providers, not just PCPs. The costs for the fee increase for physicians who did not self-attest as PCPs were financed at the regular federal medical assistance percentage (FMAP).

In the first quarters of CYs 2013 and 2014, CMS released the corresponding average Medicare fees for E&M procedures in the three geographic regions of Maryland. The new fees were retroactive to include services provided on and after January 1 of each year. As specified in the ACA, Medicaid fees that were effective on July 1, 2009, were used to estimate the costs of increasing PCP fees subject to the 100 percent federal financial participation (FFP).

Federal Share of Fee Increases for Primary Care Physicians

The federal government provided 100 percent FFP only for physicians who self-attested that they were PCPs.[3] The Department obtained self-attestations from approximately 3,600 physicians. Claims and encounter data from these physicians were identified, and payments for their 2013 E&M and vaccine administration procedures were projected. Then payments for these procedures for all physicians in CYs 2013 and 2014 were estimated. Base year utilization data for E&M and vaccine administration procedures and the trend factors between the base years and

3 The ACA specifies that higher payment should be applied to primary care services delivered by physicians with the specialty designations of family medicine, general internal medicine, and pediatric medicine.

implementation years, which were used for MCO rate setting, were utilized to estimate the costs of the fee increases in CYs 2013 and 2014, as shown in Table 3.

Table 3. Projected Costs of E&M and Vaccine Administration Fee Increases to 100 Percent of Medicare Fees in CYs 2013 and 2014 (Million Dollars)

Year	Increase in FFS Payments	Increase in MCO Payments	Total Increase in Payments
CY 2013	$23.7	$155.5	$179.2
CY 2014	$21.6	$165.6	$187.2

CMS updated the RVUs for 2014, which resulted in a decrease from the 2013 Medicare fees for E&M procedures. The decrease in estimated FFS payments in 2014 compared with 2013 in part reflects the decrease in Medicare 2014 fees. Enrollment growth related to the ACA's Medicaid expansion resulted in an increase in the estimated payments to MCOs in 2014.

For the FFS system, actual claims data for services provided in CYs 2013 and 2014 by self-attesting PCPs were submitted to CMS to claim the 100 percent FFP. The estimated payments to MCOs shown in Table 3 were multiplied by the corresponding percentages pertaining to self-attesting PCPs to calculate the payments that were subject to 100 percent FFP, as shown in Table 4. To derive the percentages of the total costs of fee increases in Table 4 that were subject to 100 percent federal financing, the estimated payments for E&M and vaccine administration claims and encounter data from self-attesting PCPs were divided by the corresponding estimated payments for all physicians (shown in Table 3).

Table 4. Payments to Self-Attesting Primary Care Physicians as a Percentage of Total Physician Payments for E&M and Vaccine Administration Procedures

Procedures	FFS Payments	MCO Payments	Total Payments
Non-Facility E&M	37%	42%	42%
Facility E&M	25%	17%	18%
Vaccine Administration	74%	68%	69%
Average Total	**29.1%**	**37.2%**	**36.3%**

The pertinent numbers in Tables 3 and 4 correspond to payments for MCOs, as federal payments for FFS were based on actual claims in CYs 2013 and 2014. Because claims and encounter data for self-attesting PCPs are primarily office-based, non-facility services comprise 42 percent of all payments for physician services, compared with only 18 percent of payments for physician services provided in facilities. Overall, the increase in payments to self-attesting PCPs was 36.3 percent of the total cost of the fee increase for these procedures.

To determine the portion of the MCOs' costs of the fee increase, which were subject to 100 percent FFP, the estimated additional payments to MCOs (in Table 3) were multiplied by 37.2 percent. Table 5 shows the Department's estimated cost of fee increases for E&M and vaccine administration procedures in CYs 2013 and 2014 that were subject to 100 percent federal financing.

Table 5. Estimated Costs of Fee Increases for Primary Care Physicians Subject to 100% FMAP (Million Dollars)[4]

	FFS	MCOs	Total
CY 2013	$6.92	$57.86	$64.78
CY 2014	$6.29	$61.65	$67.94

The amount of funding distributed to the Maryland Medical Assistance program from the Fund in FY 2013 was $109 million. With 50 percent of FMAP allocated for Medicaid and 65 percent for CHIP, the combined total amount of $222 million was used to maintain prior fee increases and increase provider reimbursement rates.

The amount of funding distributed to the Maryland Medical Assistance program from the Fund in FY 2014 was $122 million. With matching federal funds for Medicaid at 50 percent and CHIP at 65 percent, total federal matching funds reached approximately $125 million. The combined total amount of $247 million was allocated for maintaining provider reimbursement rates. Furthermore, $9.5 million federal funds were allocated for physician services provided to adults, which were covered by Medicaid expansion under the ACA for the last six months of FY 2014.

Physician Fees for FYs 2015 – 2017

Following expiration of 100 percent FFP for E&M procedures provided by PCPs, Medicaid fees for these procedures were reduced to 87 percent of Medicare fees for April through June of 2015. Subsequently, with the support of the Governor, the Maryland legislature passed laws that increased Medicaid FY 2016 fees for E&M procedures to 92 percent of Medicare 2015 fees.

The amount of funding distributed to the Maryland Medical Assistance program from the Fund in FY 2015 was $158.5 million. With matching federal funds for Medicaid at 50 percent and CHIP at 65 percent, total federal matching funds reached approximately $168.8 million. The combined total amount of $327.3 million was allocated for maintaining provider reimbursement rates. Furthermore, approximately $31 million federal funds were received for physician services provided to adults, which were covered by Medicaid expansion under the ACA for FY 2015.[5]

The amount of funding distributed to the Maryland Medical Assistance program from the Fund in FY 2016 was $153 million. With matching federal funds for Medicaid at 50 percent and CHIP at 82 percent,[6] total federal matching funds reached an estimated $214 million. The combined estimated total amount of $367 million was allocated for maintaining provider reimbursement

[4] The calculations shown in Table 5 were based on numbers in Tables 3 and 4 that were not rounded to the nearest dollar amount. Because rounded numbers are reported in these tables, they may not exactly add up.
[5] For states that expand their Medicaid program to cover individuals with income below 138% of FPL, the federal government financed 100% of the costs of Medicaid expansion from 2014 to 2016 and then the federal contribution phases down to 90% by 2020 and beyond.
[6] Under the ACA, states receive a 23 percent increase in FMAP for CHIP for federal fiscal years (FFYs) 2016 – 2019. Maryland's CHIP FMAP is currently 88 percent.

rates. Furthermore, $36 million in federal funds was assigned for physician services provided to adults, which were covered by Medicaid expansion under the ACA for FY 2016.

The Governor allocated approximately $5 million General Funds in FY 2017 for increasing Medicaid fees for E&M procedures to 94 percent of Medicare 2016 fees, effective October 1, 2016. Moreover, updates in RVUs led to decreases in Medicare fees for some procedures, resulting in Maryland Medicaid fees exceeding their corresponding Medicare fees. Therefore, effective January 1, 2017, the Department reduced any Medicaid fees that exceeded their corresponding Medicare fees, and increased the lowest Medicaid fees to approximately 72 percent of Medicare 2017 fees.

The amount of funding distributed to the Maryland Medicaid program from the Fund in FY 2017 was $142.8 million. The overall weighted average FMAP for FY 2017 was approximately 61 percent,[7] resulting in an overall state share of 39 percent. With the Fund allocation of $142.8 million, the total funds earmarked for maintaining physician reimbursement rates was $366.6 million in FY 2017, of which the federal share was $223.8 million.

IV. Maryland's Medicaid Fees Compared with Medicare and Other States' Fees

Maryland's neighboring states have their own Medicaid fee schedules. For this report, we collected data on the Medicaid physician fees of Delaware, Pennsylvania, Virginia, West Virginia, and Washington, D.C. We obtained the current physician fee schedules from the states' websites and compiled data on each state's Medicaid fees.

Table 6 compares Maryland's CY 2017 Medicaid fees with the corresponding Medicare 2017 reimbursement rates for the Baltimore region, as well as neighboring states' Medicaid fees for a sample of approximately 250 high-volume procedures in various specialty groups. In this table, procedure fees are rounded to the nearest dollar amount, and the last row of each section shows each state's weighted average Medicaid fees for the surveyed procedures as a percentage of Medicare fees in the Baltimore region. Maryland Medicaid's numbers of claims and encounters were used as the weights for fees. The average percentages of Medicare fees reported in this table correspond to the appropriate Medicare non-facility and facility fees. More specifically, Medicaid non-facility fees are compared with Medicare non-facility fees, and Medicaid facility fees, reported for Maryland and West Virginia, are compared with Medicare facility fees.

Physician fees include three components: the physician's work, practice expenses (e.g., costs of maintaining an office), and malpractice insurance expenses. The practice expense component comprises, on average, approximately 40 percent of the total physician fee. When physicians render services in facilities, such as hospitals and long-term care facilities, they do not incur a practice expense. Therefore, facility fees are typically lower than non-facility fees.

[7] The weighted average of various FMAPs, including regular Medicaid at 50 percent, enhanced CHIP funding at 88%, and ACA adult expansion at 100%, and including administrative contracts that support provider services, was approximately 61 percent.

Maryland and West Virginia have separate facility and non-facility fees. Delaware and Pennsylvania do not separate these fees. Therefore, their fees are compared with Medicare non-facility fees. Hence, for Delaware and Pennsylvania, the percentages of Medicare fees reported in Table 6 underestimate the percentages of Medicare fees for procedures performed in facilities. Virginia and Washington, D.C., have separate facility and non-facility fees for some procedures, but they did not report facility fees for some of the procedures that are included in Table 6. Therefore, the table only compares the Medicaid non-facility fees of Virginia and Washington, D.C. with the corresponding Medicare non-facility fees for the Baltimore region.

For this report, we compared Maryland's and other states' Medicaid reimbursement rates with the Medicare fee schedule for Maryland. Average Medicare fees in Maryland are approximately 4 percent higher than Medicare fees in Delaware and Pennsylvania, 1 percent higher than Medicare fees in Virginia, and 12 percent higher than Medicare fees in West Virginia. On the other hand, average Medicare fees in Maryland are approximately 5 percent lower than average Medicare fees in Washington, D.C.

Comparisons of Evaluation and Management and Specialty Procedures

The following paragraphs compare Maryland's fees with other states' fees for E&M services and each group of specialty procedures shown in Table 6. As an average percentage of Medicare 2017 fees for the Baltimore region, E&M fees in Maryland (both non-facility and facility) for the second consecutive year, rank first and second, respectively; Delaware E&M fees are ranked as third; Washington, D.C., E&M fees rank fourth; West Virginia's facility E&M fees rank fifth; West Virginia's non-facility E&M fees rank sixth; Virginia's non-facility E&M fees rank seventh; and Pennsylvania's E&M fees rank eighth. Washington, D.C.'s Medicaid fee data includes one zero fee for procedure code 99238 (hospital discharge day), and Delaware data includes one zero fee for procedure code 99244 (Office Consultation).

Surgery

Integumentary System Procedures
Similar to last year's ranking order, Delaware fees for integumentary procedures continue to rank first, followed by Washington, D.C., fees (second); Virginia non-facility fees (third); Maryland non-facility fees (fourth); Maryland facility fees (fifth); West Virginia facility fees (sixth); West Virginia non-facility fees (seventh); and Pennsylvania fees (eighth).

Musculoskeletal System Procedures
Similar to integumentary procedure fees, the state ranking order of musculoskeletal system procedure fees did not change from last year. Delaware fees for musculoskeletal system procedures remain the highest in the region. Maryland non-facility fees rank second; Maryland facility fees rank third; Washington, D.C., fees rank fourth; Virginia non-facility fees rank fifth; West Virginia facility fees rank sixth; West Virginia non-facility fees rank seventh; and Pennsylvania fees are the lowest in the region. Washington, D.C., data include one zero fee for procedure code 20552 (injection trigger point, one or two muscles), and Pennsylvania data are missing a value for procedure code 29130 (application of finger splint).

Respiratory System Procedures
Similar to last year's ranking order, Washington, D.C., respiratory procedure fees rank first, followed, in ranking order, by Delaware fees; Virginia non-facility fees; Maryland non-facility fees; Maryland facility fees; West Virginia facility fees; West Virginia non-facility fees; and Pennsylvania fees.

Cardiovascular System Surgical Procedures
For cardiovascular surgical procedures, Washington, D.C., has the highest fees. Virginia non-facility fees rank second; Maryland non-facility fees rank third; Maryland facility fees rank fourth; West Virginia facility fees rank fifth; West Virginia non-facility fees rank sixth; Delaware fees rank seventh; and Pennsylvania fees rank eighth. Because Pennsylvania data have missing fees for three surveyed procedures (procedure codes 36400, 36406, and 36410), the state's percentage of Medicare fees is lower than it would have been if these procedures were included.

Hemic, Lymphatic System, and Mediastinum Procedures
For selected hemic, lymphatic, and mediastinum procedures, Delaware has the highest fees in the region, followed by Washington, D.C., fees (second); Virginia non-facility fees (third); Maryland non-facility fees (fourth); Maryland facility fees (fifth); West Virginia facility fees (sixth); West Virginia non-facility fees (seventh); and Pennsylvania fees (eighth). Pennsylvania data have missing fees for procedure 38792 (identify sentinel node).

Digestive System Procedures
For selected digestive system procedures, Delaware fees rank the highest, followed by Washington, D.C., fees (second); Virginia non-facility fees (third); Maryland non-facility fees (fourth); Maryland facility fees (fifth); West Virginia non-facility fees (sixth); West Virginia facility fees (seventh); and Pennsylvania fees (eighth).

Urinary System and Male Genital Procedures
Similar to last year's state ranking order for urinary and male genital procedure fees, Washington, D.C., fees rank highest in the region. Maryland non-facility fees rank second; Virginia non-facility fees rank third; Maryland facility fees rank fourth; West Virginia facility fees rank fifth; West Virginia non-facility fees rank sixth; and Delaware fees rank seventh. Pennsylvania fees are lowest in the region.

Gynecology and Obstetrics Procedures
Pennsylvania fees for the selected gynecology and obstetrics procedures rank highest in the region. Maryland non-facility fees rank second; Maryland facility fees rank third; West Virginia facility fees rank fourth; West Virginia non-facility fees rank fifth; Delaware fees rank sixth; Washington, D.C., fees rank seventh; and Virginia non-facility fees rank eighth. Delaware data include one zero fee for procedure code 58300 (insert intrauterine device), and Pennsylvania data have missing fees for procedure code 59430 (care after delivery).

Endocrine System Procedures
For the selected endocrine system procedures, Delaware fees rank the highest. Washington, D.C., fees rank second; Virginia non-facility fees rank third; Maryland facility fees rank fourth;

Maryland non-facility fees rank fifth; West Virginia facility fees rank sixth; West Virginia non-facility fees rank seventh; and Pennsylvania fees rank eighth.

Nervous System Procedures
Delaware fees for nervous system procedures are the highest in the region, followed, in ranking order, by Washington, D.C., fees, Virginia non-facility fees; Maryland non-facility fees; West Virginia facility fees; Maryland facility fees; West Virginia non-facility fees; and Pennsylvania fees.

Eye Surgery Procedures
For eye surgery procedures, Delaware fees rank first; Washington, D.C., fees rank second; Pennsylvania fees rank third; Virginia non-facility fees rank fourth; Maryland non-facility fees rank fifth; Maryland facility fees rank sixth; West Virginia facility fees rank seventh; and West Virginia non-facility fees are the lowest in the region.

Ear Surgery Procedures
Similar to last year's ranking order, Washington, D.C., has the highest fees for ear surgery procedures in the region, followed by Maryland non-facility fees (second); Maryland facility fees (third); Virginia non-facility fees (fourth); West Virginia facility fees (fifth); West Virginia non-facility fees (sixth); Delaware fees (seventh); and Pennsylvania fees (eighth).

Delaware data are missing fees for procedure code 69210 (remove impacted ear wax), and Pennsylvania data are missing fees for procedure code 69990 (microsurgery add-on), which reduce their percentage of Medicare fees.

Radiology Procedures
For the selected radiology procedures, Delaware fees are highest in the region. Following Delaware, in ranking order, are Washington, D.C., fees (second); Virginia non-facility fees (third); Maryland facility and non-facility fees (fourth equal; Pennsylvania fees (sixth); West Virginia non-facility fees (seventh); and West Virginia facility fees (eighth).

Laboratory Procedures
Medicare has one fee for each laboratory procedure, regardless of place of service. Delaware has the highest fees for the selected laboratory procedures in the region, followed, in ranking order, by West Virginia, Virginia, Maryland, Washington, D.C., and Pennsylvania fees.

Medicine

Psychiatry Procedures
For selected psychiatry procedures, Maryland non-facility fees rank first in the region; Maryland facility fees rank second; Delaware fees rank third; Washington, D.C., fees rank fourth; Virginia non-facility fees rank fifth; and West Virginia facility and non-facility fees rank sixth and seventh, respectively. Pennsylvania fees are the lowest in the region.

Dialysis Procedures
Delaware fees for dialysis procedures are highest in the region, followed, in ranking order, by Washington, D.C. fees; Virginia non-facility fees; Maryland non-facility and Maryland facility fees (equal); West Virginia non-facility fees; West Virginia facility fees; and Pennsylvania fees. Pennsylvania data have missing fees for four procedures: 90960 (end-stage renal disease [ESRD] service with four visits per month, age 20+), 90961 (ESRD service, two or three visits per month, age 20+), 90962 (ESRD service, one visit per month, age 20+), and 90970 (ESRD services, per day, age 20+).

Gastroenterology Procedures
Delaware's gastroenterology fees are highest in the region, followed, in ranking order, by Washington, D.C., Virginia, Maryland, Pennsylvania, and West Virginia fees.

Ophthalmology and Vision Care Procedures
For the selected ophthalmology and vision care procedures, Delaware fees rank first in the region, followed by Washington, D.C., fees (second); Virginia non-facility fees (third); Maryland non-facility fees (fourth); Maryland facility fees (fifth); West Virginia facility fees (sixth); West Virginia non-facility fees (seventh); and Pennsylvania fees (eighth).

Otorhinolaryngology Procedures
Delaware fees are the highest for the selected otorhinolaryngology (ear, nose, and throat) procedures in the region. Washington, D.C., fees rank second; Virginia non-facility fees rank third; Maryland non-facility and facility fees rank fourth and fifth, respectively; Pennsylvania fees rank sixth; and West Virginia facility and non-facility fees rank seventh and eighth, respectively. Pennsylvania did not report a fee for procedure 92504 (ear microscopy examination).

Cardiovascular System Medical Procedures
For the selected cardiovascular medicine procedures, Delaware fees rank first, followed in ranking order by Washington, D.C., Maryland, Virginia, Pennsylvania, and West Virginia fees. Delaware data include one zero fee for procedure code 93016 (cardiovascular stress test), and Pennsylvania has a missing fee for procedure code 93325 (Doppler color flow add-on).

Noninvasive Vascular Diagnostic Studies
For the selected procedures, Delaware fees rank first, followed in ranking order by Washington D.C., fees; Maryland non-facility and facility fees (equal); Virginia non-facility fees; Pennsylvania fees; and West Virginia non-facility and facility fees, respectively.

Pulmonary Procedures
Similar to last year's report, for the selected pulmonary procedures, Delaware fees are highest in the region, followed in ranking order by Washington, D.C., Virginia non-facility, Maryland, West Virginia, and Pennsylvania fees. Pennsylvania's fee schedule does not provide a fee for procedure 94640 (airway inhalation treatment).

Allergy and Immunology Procedures
For selected allergy and immunology procedures, Delaware fees rank first; Maryland facility fees rank second; Washington, D.C., fees rank third; Maryland non-facility fees rank fourth; Virginia non-facility fees rank fifth; West Virginia facility fees rank sixth; West Virginia non-facility fees rank seventh; and Pennsylvania fees rank eighth.

Neurology and Neuromuscular Procedures
Washington, D.C., fees are the highest in the region for neurology and neuromuscular procedures, followed in ranking order by Maryland fees, Delaware fees, Virginia fees, West Virginia fees, and Pennsylvania fees. Delaware and West Virginia data include one zero fee for procedure code 95951 (EEG monitoring/video record).

Central Nervous System Assessment Tests
For the selected central nervous system (CNS) assessment procedures, Washington, D.C., fees rank first; Maryland facility and non-facility fees rank second and third, respectively; Virginia non-facility fees rank fourth; West Virginia facility and non-facility fees rank fifth and sixth, respectively; Pennsylvania fees rank seventh; and Delaware fees rank eighth.

Because Delaware's fee schedule lists $0 for procedure codes 96111 and 96116, the state's ranking as a percentage of Medicare fees is the lowest. Similarly, Pennsylvania's fee for procedure code 96102 is not available.

Chemotherapy Administration
For chemotherapy administration procedures, Delaware fees rank first, followed by Washington, D.C. fees (second); Maryland non-facility fees (third); Maryland facility fees (fourth); Pennsylvania fees (fifth); Virginia non-facility fees (sixth); West Virginia facility fees (seventh); and West Virginia non-facility fees (eighth).

Special Dermatological Procedures
As an average percentage of Medicare fees for selected dermatology procedures, Delaware has the highest fees. Virginia non-facility fees rank second; Maryland facility and non-facility fees rank third and fourth, respectively; West Virginia facility fees rank fifth; Washington, D.C., fees rank sixth; West Virginia non-facility fees rank seventh; and Pennsylvania fees rank eighth.

Because Washington, D.C., data have missing values for three surveyed procedures (96920, 96921, and 96922), its percentages of Medicare fees are lower than they would have been if these procedures were covered.

Physical Medicine and Rehabilitation Procedures
Delaware fees rank highest for physical medicine and rehabilitation procedures, followed in ranking order by Washington, D.C., Virginia, Maryland, West Virginia, and Pennsylvania fees.

Osteopathy, Chiropractic, and Other Medicine Procedures
For the selected osteopathy, chiropractic, and other medicine procedures, Pennsylvania fees are highest, followed in ranking order by Delaware fees; Washington, D.C., fees; Maryland non-

facility fees; Virginia non-facility fees; Maryland facility fees; and West Virginia facility and non-facility fees. Washington, D.C., data have a zero fee for procedure code 98941.

Table 6. Comparison of Maryland and Neighboring States' Medicaid Fees with Medicare Fees, in FY 2017

Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Evaluation & Management Procedures											
99203	Office/outpatient visit, new	$117	$82	$109	$77	$110	$73	$75	$55	$54	$99
99204	Office/outpatient visit, new	$177	$139	$166	$130	$167	$112	$115	$93	$90	$150
99212	Office/outpatient visit, established	$47	$27	$44	$25	$44	$30	$29	$18	$26	$40
99213	Office/outpatient visit, established	$79	$54	$73	$51	$74	$49	$50	$36	$35	$67
99214	Office/outpatient visit, established	$116	$84	$108	$78	$109	$73	$74	$56	$54	$98
99223	Initial hospital care	$217	$217	$202	$202	$204	$137	$145	$145	$42	$181
99232	Subsequent hospital care	$77	$77	$72	$72	$73	$49	$52	$52	$17	$64
99238	Hospital discharge day	$78	$78	$72	$72	$73	$49	$51	$51	$17	$0
99244	Office consultation	$196	$164	$184	$153	$0	$124	$128	$110	$121	$165
99283	Emergency dept visit	$66	$66	$62	$62	$63	$44	$45	$45	$35	$55
99284	Emergency dept visit	$125	$125	$117	$117	$119	$83	$86	$86	$50	$104
99285	Emergency dept visit	$185	$185	$172	$172	$175	$122	$128	$128	$50	$153
99291	Critical care, first hour	$295	$239	$276	$223	$278	$186	$194	$162	$152	$248
99308	Nursing fac care, subseq	$74	$74	$69	$69	$70	$47	$49	$49	$37	$62
99381	Init pm e/m, new pat, inf	$119	$82	$111	$76	$112	$75	$76	$55	$20	$101
99391	Per pm reeval, est pat, inf	$107	$75	$100	$70	$100	$67	$68	$50	$20	$90
99392	Preventive visit, established, age 1-4	$114	$82	$107	$76	$107	$72	$73	$55	$20	$96
99393	Preventive visit, established, age 5-11	$113	$82	$106	$76	$107	$71	$73	$55	$20	$96
99394	Preventive visit, established, age 12-17	$124	$92	$116	$87	$117	$78	$80	$62	$20	$105
99469	Neonate crit care, subsq	$426	$426	$397	$397	$402	$309	$287	$287	$240	$354
99472	Ped critical care, subsq	$441	$441	$409	$409	$414	$319	$295	$295	$240	$365
99479	Ic lbw inf 1500-2500 g subsq	$133	$133	$124	$124	$126	$97	$90	$90	$76	$111
	Weighted Average % of Medicare Fees	N/A	N/A	93%	93%	92%	64%	65%	67%	41%	83%
	Ranking	N/A	N/A	1	2	3	7	6	5	8	4

MC: Medicare Part B; NF: non-facility (e.g., office); FA: facility (e.g., hospital); N/A: data not available or not applicable.

Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Integumentary Procedures											
10060	Drainage of skin abscess	$128	$107	$93	$77	$120	$101	$80	$67	$24	$109
10061	Drainage of skin abscess	$226	$197	$163	$143	$211	$179	$142	$126	$53	$192
11042	Debride skin/tissue	$128	$68	$93	$49	$119	$101	$78	$45	$33	$110
11056	Trim skin lesions 2 to 4	$64	$24	$46	$24	$59	$50	$39	$17	$30	$54
11100	Biopsy skin lesion	$114	$54	$82	$39	$106	$89	$69	$35	$35	$97
11721	Debride nail, 6 or more	$49	$27	$35	$21	$46	$39	$31	$18	$20	$42
12001	Repair superficial wound(s)	$98	$48	$88	$43	$91	$77	$60	$33	$25	$84
12011	Repair superficial wound(s)	$120	$60	$113	$54	$111	$94	$74	$41	$32	$102
17110	Destruct b9 lesion, 1-14	$122	$77	$89	$56	$113	$96	$73	$48	$49	$105
17250	Chemical cautery, tissue	$87	$41	$63	$30	$81	$69	$52	$26	$26	$75
	Weighted Average % of Medicare Fees	N/A	N/A	77%	76%	93%	79%	61%	65%	29%	85%
	Ranking	N/A	N/A	4	5	1	3	7	6	8	2
SURGERY											
Musculoskeletal System Procedures											
20550	Inj tendon sheath/ligament	$57	$43	$56	$39	$60	$51	$41	$31	$32	$55
20552	Inj trigger point, 1/2 muscl	$60	$42	$50	$33	$57	$48	$38	$28	$31	$0
20553	Inject trigger points 3/>	$70	$47	$55	$37	$65	$55	$44	$31	$34	$59
20610	Drain/inject, joint/bursa	$66	$51	$66	$48	$62	$53	$42	$34	$24	$56
25600	Treat fracture radius/ulna	$362	$342	$262	$248	$340	$287	$222	$211	$115	$311
29075	Application of forearm cast	$96	$69	$80	$58	$91	$77	$59	$44	$46	$83
29125	Apply forearm splint	$71	$43	$61	$39	$67	$57	$43	$28	$26	$61
29130	Application of finger splint	$45	$31	$37	$27	$43	$36	$29	$21	N/A	$38
29515	Application lower leg splint	$80	$55	$65	$47	$74	$63	$49	$35	$35	$68
29540	Strapping of ankle and/or ft	$28	$20	$28	$20	$27	$23	$18	$13	$20	$24
	Weighted Average % of Medicare Fees	N/A	N/A	87%	85%	94%	80%	63%	65%	39%	82%
	Ranking	N/A	N/A	2	3	1	5	7	6	8	4

MC: Medicare Part B; NF: non-facility (e.g., office); FA: facility (e.g., hospital); N/A: data not available or not applicable.

Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Respiratory System Procedures											
30300	Remove nasal foreign body	$196	$116	$161	$88	$192	$162	$123	$73	$23	$179
31231	Nasal endoscopy, dx	$231	$71	$167	$57	$217	$183	$138	$48	$59	$203
31237	Nasal/sinus endoscopy surg	$283	$176	$232	$136	$267	$226	$178	$118	$160	$245
31500	Insert emergency airway	$154	$154	$112	$112	$114	$97	$83	$83	$72	$99
31575	Diagnostic laryngoscopy	$125	$75	$91	$57	$118	$100	$78	$55	$69	$108
31622	Dx bronchoscope/wash	$265	$145	$236	$108	$149	$264	$206	$107	$134	$288
31624	Dx bronchoscope/lavage	$277	$148	$241	$108	$153	$272	$211	$109	$135	$296
32551	Insertion of chest tube	$174	$174	$128	$128	$177	$150	$128	$128	$133	$156
	Weighted Average % of Medicare Fees	N/A	N/A	76%	75%	85%	80%	62%	65%	41%	86%
	Ranking	N/A	N/A	4	5	2	3	7	6	8	1
Cardiovascular System Surgical Procedures											
36400	Bl draw < 3 yrs fem/jugular	$30	$20	$21	$14	$31	$26	$21	$15	N/A	$28
36406	Bl draw < 3 yrs other vein	$20	$10	$15	$7	$17	$15	$12	$6	N/A	$15
36410	Non-routine bl draw > 3 yrs	$19	$10	$14	$7	$17	$15	$12	$7	N/A	$16
36556	Insert non-tunnel cv cath	$256	$132	$194	$96	$126	$205	$160	$91	$113	$219
36558	Insert tunneled cv cath	$792	$291	$670	$217	$288	$680	$518	$205	$266	$750
36561	Insert tunneled cv cath	$1,206	$377	$938	$273	$371	$1,024	$774	$264	$319	$1,133
36569	Insert picc cath	$275	$100	$226	$73	$95	$217	$166	$68	$87	$238
36620	Insertion catheter, artery	$55	$55	$40	$40	$53	$46	$38	$38	$48	$46
	Weighted Average % of Medicare Fees	N/A	N/A	78%	73%	45%	83%	64%	69%	35%	90%
	Ranking	N/A	N/A	3	4	7	2	6	5	8	1

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Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Hemic, Lymphatic System and Mediastinum Procedures											
38220	Bone marrow aspiration	$186	$68	$134	$49	$169	$143	$109	$45	$55	$157
38221	Bone marrow biopsy	$184	$81	$136	$59	$171	$145	$112	$54	$70	$158
38500	Biopsy/removal lymph nodes	$368	$283	$266	$205	$345	$292	$235	$188	$114	$314
38505	Needle biopsy lymph nodes	$139	$79	$101	$57	$130	$110	$86	$51	$67	$120
38525	Biopsy/removal, lymph nodes	$487	$487	$353	$353	$457	$387	$323	$323	$156	$411
38792	Identify sentinel node	$44	$44	$32	$32	$41	$35	$28	$28		$38
38900	Io map of sent lymph node	$154	$154	$113	$113	$145	$122	$106	$106	$110	$129
	Weighted Average % of Medicare Fees	N/A	N/A	73%	73%	93%	79%	63%	66%	35%	85%
	Ranking	N/A	N/A	4	5	1	3	7	6	8	2
Digestive System											
42820	Remove tonsils and adenoids	$319	$319	$231	$231	$304	$258	$211	$211	$184	$274
42830	Removal of adenoids	$230	$230	$167	$167	$217	$184	$148	$148	$134	$197
43235	Upper GI endoscopy, diagnosis	$282	$138	$229	$104	$319	$270	$207	$95	$125	$296
43239	Upper GI endoscopy, biopsy	$378	$156	$274	$123	$408	$345	$262	$108	$149	$379
45378	Diagnostic colonoscopy	$347	$208	$299	$155	$389	$329	$256	$143	$181	$358
45380	Colonoscopy and biopsy	$445	$225	$357	$186	$481	$407	$314	$154	$225	$444
45385	Lesion removal colonoscopy	$467	$285	$400	$221	$504	$427	$334	$195	$268	$463
47562	Laparoscopic cholecystectomy	$734	$734	$532	$532	$688	$582	$492	$492	$589	$617
49082	Abd paracentesis	$213	$82	$154	$60	$197	$167	$127	$55	$55	$183
	Weighted Average % of Medicare Fees	N/A	N/A	77%	76%	105%	89%	70%	68%	53%	97%
	Ranking	N/A	N/A	4	5	1	3	6	7	8	2

MC: Medicare Part B; NF: non-facility (e.g., office); FA: facility (e.g., hospital); N/A: data not available or not applicable.

Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Urinary System and Male Genital Procedures											
51600	Injection for bladder x-ray	$203	$48	$162	$35	$46	$159	$119	$33	$32	$176
51700	Irrigation of bladder	$80	$40	$70	$34	$85	$72	$57	$33	$29	$78
51701	Insert bladder catheter	$52	$28	$47	$21	$56	$47	$37	$20	$25	$51
51741	Electro-uroflowmetry first	$17	$17	$16	$16	$16	$14	$11	$11	$24	$15
51798	Us urine capacity measure	$22	$22	$16	$16	$20	$16	$12	$12	$14	$14
52000	Cystoscopy	$181	$113	$163	$94	$130	$177	$140	$92	$75	$191
52332	Cystoscopy and treatment	$542	$172	$393	$124	$161	$422	$319	$114	$144	$465
54150	Circumcision w/regionl block	$170	$108	$145	$78	$101	$134	$107	$72	$79	$143
54161	Circum 28 days or older	$217	$217	$157	$157	$203	$173	$143	$143	$128	$181
	Weighted Average % of Medicare Fees	N/A	N/A	81%	73%	35%	79%	60%	69%	25%	86%
	Ranking	N/A	N/A	2	4	7	3	6	5	8	1
Gynecology and Obstetrics Procedures											
57452	Exam of cervix w/scope	$119	$101	$108	$88	$112	$97	$77	$67	$40	$100
57454	Bx/curett of cervix w/scope	$166	$148	$152	$133	$156	$136	$108	$98	$106	$140
58100	Biopsy of uterus lining	$119	$95	$109	$85	$111	$97	$77	$63	$51	$100
58300	Insert intrauterine device	$79	$59	$76	$52	$0	$65	$51	$40	$17	$67
58301	Remove intrauterine device	$103	$73	$95	$66	$96	$84	$66	$49	$17	$87
59025	Fetal non-stress test	$54	$54	$46	$46	$50	$43	$34	$34	$18	$46
59409	Obstetrical care	$907	$907	$860	$860	$852	$742	$891	$891	$1,200	$757
59410	Obstetrical care	$1,159	$1,159	$942	$942	$1,085	$945	$1,133	$1,133	$1,200	$967
59430	Care after delivery	$205	$155	$149	$125	$191	$166	$192	$152	N/A	$173
59514	Cesarean delivery only	$1,023	$1,023	$993	$993	$852	$837	$1,005	$1,005	$1,200	$854
59515	Cesarean delivery w postpartum	$1,411	$1,411	$1,124	$1,124	$1,085	$1,150	$1,377	$1,377	$2,050	$1,177
	Weighted Average % of Medicare Fees	N/A	N/A	91%	90%	87%	82%	88%	90%	93%	84%
	Ranking	N/A	N/A	2	3	6	8	5	4	1	7

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Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Endocrine System Procedures											
60100	Biopsy of thyroid	$123	$86	$89	$63	$116	$98	$79	$59	$66	$105
60220	Partial removal of thyroid	$780	$780	$565	$565	$737	$625	$522	$522	$521	$661
60240	Removal of thyroid	$1,017	$1,017	$737	$737	$959	$813	$684	$684	$591	$858
60500	Explore parathyroid glands	$1,070	$1,070	$775	$775	$1,007	$853	$718	$718	$705	$902
	Weighted Average % of Medicare Fees	N/A	N/A	72%	72%	94%	80%	67%	67%	61%	85%
	Ranking	N/A	N/A	5	4	1	3	7	6	8	2
Nervous System Procedures											
62270	Spinal fluid tap, diagnostic	$175	$86	$150	$73	$163	$138	$108	$57	$42	$151
62311	Inject spine l/s (cd)	$245	$98	$183	$79	$231	$195	$147	$65	$75	$212
64450	N block, other peripheral	$88	$50	$88	$50	$82	$70	$54	$33	$21	$75
64483	Inj foramen epidural l/s	$238	$122	$238	$101	$227	$192	$148	$81	$95	$208
64484	Inj foramen epidural add-on	$95	$56	$95	$55	$91	$77	$60	$38	$60	$82
64494	Inj paravert f jnt l/s 2 lev	$94	$56	$87	$54	$54	$76	$60	$38	$42	$81
64495	Inj paravert f jnt l/s 3 lev	$94	$57	$88	$55	$55	$76	$60	$39	$42	$81
	Weighted Average % of Medicare Fees	N/A	N/A	95%	89%	112%	102%	72%	94%	47%	111%
	Ranking	N/A	N/A	4	6	1	3	7	5	8	2

MC: Medicare Part B; NF: non-facility (e.g., office); FA: facility (e.g., hospital); N/A: data not available or not applicable.

Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Eye Surgery Procedures											
65222	Remove foreign body from eye	$72	$56	$52	$41	$68	$57	$45	$36	$26	$61
65855	Laser surgery of eye	$265	$225	$227	$195	$278	$236	$183	$163	$237	$255
66821	After cataract laser surgery	$359	$339	$260	$246	$336	$285	$222	$211	$217	$307
66982	Cataract surgery complex	$862	$862	$678	$678	$808	$687	$552	$552	$697	$730
66984	Cataract surg w/iol, 1 stage	$694	$694	$503	$503	$644	$547	$441	$441	$603	$589
67028	Injection eye drug	$110	$109	$99	$98	$104	$88	$71	$70	$106	$94
67210	Treatment of retinal lesion	$563	$544	$430	$413	$528	$449	$354	$344	$375	$479
67228	Treatment of retinal lesion	$370	$333	$333	$300	$348	$295	$234	$214	$491	$314
67311	Revise eye muscle	$649	$649	$470	$470	$611	$519	$412	$412	$468	$552
67800	Remove eyelid lesion	$138	$112	$100	$81	$130	$110	$86	$72	$41	$118
	Weighted Average % of Medicare Fees	N/A	N/A	77%	77%	97%	80%	64%	64%	84%	85%
	Ranking	N/A	N/A	5	6	1	4	8	7	3	2
Ear Surgery Procedures											
69200	Clear outer ear canal	$91	$52	$82	$49	$102	$86	$67	$34	$30	$95
69205	Clear outer ear canal	$112	$112	$91	$91	$106	$89	$72	$72	$89	$96
69210	Remove impacted ear wax	$53	$36	$44	$29	N/A	$43	$34	$24	$20	$46
69424	Remove ventilating tube	$140	$68	$115	$55	$132	$111	$85	$44	$54	$123
69436	Create eardrum opening	$176	$176	$149	$149	$167	$142	$114	$114	$99	$152
69990	Microsurgery add-on	$251	$251	$199	$199	$231	$195	$172	$172	N/A	$210
	Weighted Average % of Medicare Fees	N/A	N/A	84%	83%	50%	82%	65%	67%	41%	88%
	Ranking	N/A	N/A	2	3	7	4	6	5	8	1

MC: Medicare Part B; NF: non-facility (e.g., office); FA: facility (e.g., hospital); N/A: data not available or not applicable.

Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Radiology Procedures											
70450	Ct head/brain w/o dye	$127	$127	$114	$114	$117	$99	$76	$76	$117	$109
71010	Chest x-ray	$25	$25	$20	$20	$23	$19	$15	$15	$19	$21
71020	Chest x-ray	$31	$31	$26	$26	$28	$24	$18	$18	$25	$26
72193	Ct pelvis w/dye	$248	$248	$223	$223	$229	$194	$145	$145	$140	$215
73610	X-ray exam of ankle	$35	$35	$25	$25	$32	$27	$20	$20	$27	$29
73630	X-ray exam of foot	$32	$32	$24	$24	$30	$25	$19	$19	$19	$27
74000	X-ray exam of abdomen	$26	$26	$21	$21	$24	$20	$15	$15	$18	$22
74160	Ct abdomen w/dye	$254	$254	$228	$228	$234	$198	$149	$149	$149	$219
74177	Ct abd & pelv w/contrast	$342	$342	$287	$287	$315	$267	$201	$201	$263	$294
76805	Ob us >/= 14 wks, sngl fetus	$158	$158	$114	$114	$145	$126	$93	$93	$78	$135
76815	Ob us, limited, fetus(s)	$94	$94	$70	$70	$86	$75	$56	$56	$64	$80
76816	Ob us follow-up per fetus	$128	$128	$93	$93	$118	$103	$76	$76	$72	$109
76817	Transvaginal us obstetric	$108	$108	$78	$78	$100	$87	$65	$65	$88	$92
76819	Fetal biophys profil w/o nst	$100	$100	$78	$78	$91	$79	$59	$59	$86	$84
76820	Umbilical artery echo	$53	$53	$50	$50	$49	$43	$32	$32	$46	$44
76830	Transvaginal us non-ob	$135	$135	$98	$98	$125	$108	$79	$79	$77	$116
76856	Us exam pelvic complete	$122	$122	$88	$88	$112	$98	$72	$72	$77	$104
	Weighted Average % of Medicare Fees	N/A	N/A	78%	78%	92%	79%	60%	60%	71%	85%
	Ranking	N/A	N/A	4	4	1	3	7	8	6	2

MC: Medicare Part B; NF: non-facility (e.g., office); FA: facility (e.g., hospital); N/A: data not available or not applicable.

Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Laboratory Procedures											
80053	Comprehen metabolic panel	$14	$14	$11	$11	$14	$12	$13	$13	$12	$12
80061	Lipid panel	$17	$17	$13	$13	$18	$15	$16	$16	$14	$15
81002	Urinalysis nonauto w/o scope	$3	$3	$3	$3	$3	$3	$3	$3	$4	$2
83655	Assay of lead	$16	$16	$13	$13	$16	$14	$15	$15	$10	$8
85025	Complete cbc w/auto diff wbc	$11	$11	$8	$8	$10	$9	$10	$10	$6	$8
86592	Blood serology, qualitative	$5	$5	$4	$4	$6	$4	$5	$5	$4	$5
87081	Culture screen only	$9	$9	$7	$7	$9	$8	$8	$8	$5	$7
87086	Urine culture/colony count	$11	$11	$9	$9	$11	$8	$10	$10	$8	$9
87491	Chylmd trach, dna, amp probe	$42	$42	$34	$34	$47	$38	$43	$43	$23	$38
87880	Strep a assay w/optic	$16	$16	$13	$13	$15	$14	$15	$15	$6	$7
	Weighted Average % of Medicare Fees	N/A	N/A	79%	79%	102%	87%	95%	95%	63%	77%
	Ranking	N/A	N/A	5	5	1	4	2	2	8	7
MEDICINE											
Psychiatry Procedures											
90834	Psytx, pt&/ family 45 minutes	$89	$88	$88	$88	$85	$73	$62	$61	$39	$73
90837	Psytx, pt&/ family 60 minutes	$133	$132	$133	$133	$127	$109	$93	$92	$52	$111
90847	Family psytx w/ patient	$112	$111	$111	$107	$107	$91	$77	$77	$13	$92
	Weighted Average % of Medicare Fees	N/A	N/A	100%	99%	96%	82%	70%	70%	35%	83%
	Ranking	N/A	N/A	1	2	3	5	7	6	8	4

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Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Dialysis Procedures											
90935	Hemodialysis, one evaluation	$77	$77	$56	$56	$73	$62	$52	$52	$35	$64
90937	Hemodialysis, repeated eval	$111	$111	$80	$80	$105	$89	$75	$75	$35	$92
90945	Dialysis, one evaluation	$92	$92	$66	$66	$87	$74	$61	$61	$35	$77
90960	Esrd srv 4 visits p mo 20+	$303	$303	$219	$219	$286	$244	$202	$202	N/A	$255
90961	Esrd srv 2-3 vsts p mo 20+	$254	$254	$184	$184	$241	$205	$169	$169	N/A	$214
90962	Esrd serv 1 visit p mo 20+	$196	$196	$142	$142	$186	$158	$130	$130	N/A	$166
90970	Esrd home pt serv p day 20+	$8	$8	$6	$6	$8	$7	$6	$6	N/A	$7
	Weighted Average % of Medicare Fees	N/A	N/A	72%	72%	95%	81%	67%	67%	17%	84%
	Ranking	N/A	N/A	4	4	1	3	6	7	8	2
Gastroenterology Procedures											
91034	Gastroesophageal reflux test	$207	$207	$167	$167	$193	$163	$122	$122	$172	$181
91038	Esoph imped funct test > 1hr	$495	$495	$359	$359	$459	$388	$284	$284	$98	$432
91065	Breath hydrogen/methane test	$83	$83	$60	$60	$80	$68	$50	$50	$17	$75
91110	Gi tract capsule endoscopy	$933	$933	$733	$733	$900	$761	$564	$564	$680	$843
91122	Anal pressure record	$251	$251	$190	$190	$231	$196	$150	$150	$69	$214
	Weighted Average % of Medicare Fees	N/A	N/A	78%	78%	96%	81%	60%	60%	64%	90%
	Ranking	N/A	N/A	4	4	1	3	7	8	6	2

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Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Ophthalmology and Vision Care Procedures											
92004	Eye exam, new patient	$161	$107	$117	$77	$150	$127	$100	$71	$59	$136
92012	Eye exam established pat	$93	$57	$67	$41	$86	$73	$57	$37	$29	$79
92014	Eye exam & treatment	$134	$86	$97	$62	$125	$106	$83	$56	$45	$114
92015	Refraction	$21	$21	$19	$15	$20	$17	$14	$14	$5	$18
92060	Special eye evaluation	$71	$71	$51	$51	$66	$56	$44	$44	$34	$60
92081	Visual field examination(s)	$37	$37	$33	$33	$34	$29	$23	$23	$28	$32
92083	Visual field examination(s)	$70	$70	$57	$57	$65	$55	$42	$42	$63	$60
92250	Eye exam with photos	$72	$72	$54	$54	$79	$67	$51	$51	$53	$75
	Weighted Average % of Medicare Fees	N/A	N/A	73%	73%	93%	79%	62%	66%	37%	85%
	Ranking	N/A	N/A	4	5	1	3	7	6	8	2
Otorhinolaryngology Procedures											
92504	Ear microscopy examination	$33	$10	$26	$9	$31	$26	$19	$7	N/A	$29
92546	Sinusoidal rotational test	$113	$113	$82	$82	$105	$89	$66	$66	$22	$99
92547	Supplemental electrical test	$7	$7	$5	$5	$6	$5	$4	$4	$4	$6
92551	Pure tone hearing test, air	$13	$13	$10	$10	$12	$10	$8	$8	$8	$12
92552	Pure tone audiometry, air	$35	$35	$25	$25	$32	$27	$19	$19	$8	$30
92557	Comprehensive hearing test	$41	$35	$37	$32	$38	$32	$26	$23	$29	$34
92567	Tympanometry	$16	$12	$14	$11	$15	$13	$10	$8	$12	$13
92568	Acoustic refl threshold tst	$17	$17	$16	$16	$16	$14	$12	$11	$10	$14
92585	Auditory evoked potentials (ABR comprehensive)	$150	$150	$108	$108	$138	$117	$87	$87	$27	$130
92587	Evoked auditory (otoacoustic emission) testing	$23	$23	$21	$21	$22	$19	$15	$15	$34	$20
	Weighted Average % of Medicare Fees	N/A	N/A	78%	77%	92%	78%	58%	60%	60%	86%
	Ranking	N/A	N/A	4	5	1	3	8	7	6	2

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Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Cardiovascular System Medical Procedures											
93000	Electrocardiogram, complete	$19	$19	$18	$18	$17	$15	$12	$12	$19	$16
93010	Electrocardiogram report	$9	$9	$7	$7	$9	$7	$6	$6	$8	$8
93015	Cardiovascular stress test	$83	$83	$80	$80	$77	$65	$51	$51	$90	$71
93016	Cardiovascular stress test	$24	$24	$18	$18	$0	$19	$16	$16	$22	$20
93018	Cardiovascular stress test	$16	$16	$12	$12	$15	$13	$10	$10	$15	$13
93042	Rhythm ECG, report	$8	$8	$6	$6	$7	$6	$5	$5	$7	$6
93303	Echo transthoracic	$260	$260	$188	$188	$243	$205	$154	$154	$157	$227
93306	Tte w/doppler complete	$251	$251	$206	$206	$232	$196	$148	$148	$141	$216
93307	Tte w/o doppler, complete	$142	$142	$128	$128	$132	$112	$85	$85	$140	$123
93320	Doppler echo exam, heart	$59	$59	$53	$53	$55	$47	$35	$35	$61	$51
93325	Doppler color flow add-on	$28	$28	$25	$25	$26	$22	$16	$16	N/A	$25
	Weighted Average % of Medicare Fees	N/A	N/A	81%	81%	92%	79%	60%	60%	65%	86%
	Ranking	N/A	N/A	3	3	1	5	7	8	6	2
Noninvasive Vascular Diagnostic Studies											
93880	Extracranial study	$224	$224	$162	$162	$196	$175	$131	$131	$148	$195
93922	Upr/l xtremity art 2 levels	$98	$98	$97	$97	$91	$77	$57	$57	$49	$86
93970	Extremity study	$218	$218	$158	$158	$190	$171	$127	$127	$147	$191
93971	Extremity study	$133	$133	$96	$96	$123	$104	$78	$78	$100	$117
93975	Vascular study	$310	$310	$225	$225	$214	$245	$183	$183	$182	$273
93976	Vascular study	$167	$167	$162	$162	$167	$141	$106	$106	$131	$157
	Weighted Average % of Medicare Fees	N/A	N/A	82%	82%	91%	81%	60%	60%	71%	90%
	Ranking	N/A	N/A	3	3	1	5	7	8	6	2

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Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Pulmonary Procedures											
94010	Breathing capacity test	$39	$39	$29	$29	$36	$31	$23	$23	$15	$35
94060	Evaluation of wheezing	$67	$67	$49	$49	$62	$53	$39	$39	$19	$58
94375	Respiratory flow volume loop	$43	$43	$31	$31	$40	$34	$26	$26	$31	$37
94640	Airway inhalation treatment	$21	$21	$15	$15	$19	$16	$12	$12	N/A	$18
94664	Evaluate pt use of inhaler	$19	$19	$14	$14	$18	$15	$11	$11	$12	$17
94760	Measure blood oxygen level	$4	$4	$3	$3	$3	$3	$2	$2	$2	$3
94761	Measure blood oxygen level	$5	$5	$5	$5	$5	$4	$3	$3	$4	$5
	Weighted Average % of Medicare Fees	N/A	N/A	73%	73%	92%	78%	58%	58%	34%	87%
	Ranking	N/A	N/A	4	4	1	3	7	6	8	2
Allergy and Immunology Procedures											
95004	Percut allergy skin tests	$8	$8	$5	$5	$7	$6	$4	$4	$2	$7
95024	Id allergy test, drug/bug	$9	$1	$6	$1	$8	$7	$5	$1	$5	$8
95115	Immunotherapy, one injection	$10	$10	$9	$9	$9	$8	$6	$6	$4	$9
95117	Immunotherapy injections	$11	$11	$10	$10	$11	$9	$6	$6	$7	$10
95165	Antigen therapy services	$14	$3	$10	$2	$13	$11	$8	$2	$8	$12
	Weighted Average % of Medicare Fees	N/A	N/A	86%	88%	92%	77%	55%	56%	53%	87%
	Ranking	N/A	N/A	4	2	1	5	7	6	8	3

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Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Neurology and Neuromuscular Procedures											
95810	Polysomnography, 4 or more	$686	$686	$628	$628	$636	$538	$400	$400	$347	$598
95811	Polysom 6/>yrs cpap 4/> parm	$721	$721	$691	$691	$668	$565	$420	$420	$648	$629
95816	EEG, awake and drowsy	$399	$399	$289	$289	$369	$312	$230	$230	$23	$349
95819	EEG, awake and asleep	$459	$459	$333	$333	$422	$356	$263	$263	$23	$400
95860	Muscle test, one limb	$134	$134	$97	$97	$124	$105	$80	$80	$30	$115
95886	Musc test done w/n test comp	$99	$99	$72	$72	$93	$79	$61	$61	$66	$85
95926	Somatosensory testing	$148	$148	$107	$107	$140	$119	$88	$88	$58	$132
95930	Visual evoked potential test	$143	$143	$104	$104	$131	$110	$82	$82	$74	$125
95951	EEG monitoring/video record	$2,039	$2,039	$450	$450	$0	$266	$0	$0	$228	$449
95957	EEG digital analysis	$335	$335	$243	$243	$320	$271	$206	$206	$138	$299
	Weighted Average % of Medicare Fees	N/A	N/A	63%	63%	61%	56%	39%	39%	33%	65%
	Ranking	N/A	N/A	2	2	4	5	7	6	8	1
Central Nervous System Assessment Tests											
96102	Psycho testing by technician	$68	$25	$49	$23	$65	$55	$42	$17	N/A	$60
96110	Developmental test, lim	$11	$11	$9	$9	$9	$8	$6	$6	$7	$9
96111	Developmental test, extend	$140	$133	$101	$96	$0	$111	$93	$89	$50	$115
96116	Neurobehavioral status exam	$98	$92	$72	$70	$0	$80	$67	$63	$53	$82
96118	Neuropsych tst by psych/phys	$104	$83	$84	$68	$99	$84	$69	$57	$40	$87
	Weighted Average % of Medicare Fees	N/A	N/A	77%	78%	41%	76%	60%	60%	50%	82%
	Ranking	N/A	N/A	3	2	8	4	6	5	7	1

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Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Chemotherapy Administration											
96411	Chemo, iv push, addl drug	$69	$69	$53	$53	$63	$53	$40	$40	$53	$60
96413	Chemo, iv infusion, 1 hr	$153	$153	$126	$126	$138	$116	$86	$86	$125	$130
96415	Chemo, iv infusion, addl hr	$31	$31	$28	$28	$29	$24	$19	$19	$28	$27
96417	Chemo iv infus each addl seq	$72	$72	$62	$62	$64	$54	$40	$40	$62	$60
96450	Chemotherapy, into CNS	$198	$87	$179	$75	$185	$157	$121	$58	$77	$171
96523	Irrig drug delivery device	$27	$27	$21	$21	$25	$21	$15	$15	$19	$24
	Weighted Average % of Medicare Fees	N/A	N/A	83%	83%	90%	76%	57%	57%	78%	85%
	Ranking	N/A	N/A	3	4	1	6	8	7	5	2
Special Dermatological Procedures											
96910	Photochemotherapy with UV-B	$79	$79	$57	$57	$73	$62	$44	$44	$20	$69
96912	Photochemotherapy with UV-A	$102	$102	$74	$74	$93	$79	$56	$56	$20	$89
96920	Laser tx skin < 250 sq cm	$171	$73	$124	$53	$158	$134	$102	$48	$59	N/A
96921	Laser tx skin 250-500 sq cm	$188	$82	$136	$60	$174	$148	$112	$54	$59	N/A
96922	Laser tx skin >500 sq cm	$259	$132	$188	$96	$242	$205	$157	$86	$98	N/A
	Weighted Average % of Medicare Fees	N/A	N/A	72%	72%	93%	78%	46%	71%	28%	57%
	Ranking	N/A	N/A	4	3	1	2	7	5	8	6

MC: Medicare Part B; NF: non-facility (e.g., office); FA: facility (e.g., hospital); N/A: data not available or not applicable.

Procedure Code	Procedure Description	MC NF	MC FA	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
Physical Medicine and Rehabilitation Procedures											
97001	Pt evaluation			$72	$72	$76	$64	$52	$52	$45	$68
97010	Hot or cold packs therapy	$7	$7	$5	$5	$6	$5	$4	$4	$17	$6
97014	Electric stimulation therapy	$17	$17	$13	$13	$16	$14	$11	$11	$17	$15
97035	Ultrasound therapy	$14	$14	$10	$10	$13	$11	$9	$9	$10	$12
97110	Therapeutic exercises	$35	$35	$29	$29	$33	$28	$22	$22	$8	$29
97112	Neuromuscular reeducation	$37	$37	$27	$27	$34	$29	$23	$23	$17	$31
97140	Manual therapy	$32	$32	$23	$23	$30	$26	$20	$20	$21	$27
97530	Therapeutic activities	$38	$38	$31	$31	$35	$30	$23	$23	$13	$32
	Weighted Average % of Medicare Fees	N/A	N/A	87%	87%	103%	88%	70%	70%	54%	93%
	Ranking	N/A	N/A	4	4	1	3	7	6	8	2
Osteopathy, Chiropractic, and Other Medicine Procedures											
98941	Chiropractic manipulation	$43	$37	$32	$27	$41	$35	$29	$25	$13	$0
99173	Visual acuity screen	$4	$4	$3	$3	$3	$2	$2	$2	$6	$3
99183	Hyperbaric oxygen therapy	$119	$119	$107	$86	$112	$96	$81	$81	$107	$99
	Weighted Average % of Medicare Fees	N/A	N/A	78%	72%	92%	73%	62%	62%	138%	83%
	Ranking	N/A	N/A	4	6	2	5	8	7	1	3

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Table 7 compares states' Medicaid reimbursement rates as percentages of Medicare rates by physician specialty in 2017. It provides the last two rows of Table 6 for each of the specialty groups. The numbers in parentheses are the ranking of the regions for each physician specialty fees.

Table 7. Comparison of States' Medicaid Reimbursement Rates as Percentages of Medicare Rates (Region Rank), by Specialty, in 2017

	MD NF	MD FA	DE	VA NF	WV NF	WV FA	PA	DC
1-Evaluation & Management	93% (1)	93% (2)	92% (3)	70% (5)	65% (7)	68% (6)	41% (8)	84% (4)
2-Integumentary System	76% (4)	76% (5)	93% (1)	77% (3)	62% (7)	65% (6)	29% (8)	86% (2)
3-Musculoskeletal System	88% (2)	86% (3)	94% (1)	77% (5)	63% (7)	65% (6)	39% (8)	81% (4)
4-Respiratory System	76% (4)	75% (5)	85% (2)	77% (3)	62% (7)	67% (6)	41% (8)	86% (1)
5-Cardiovascular System - Surgical	79% (2)	73% (4)	45% (7)	77% (3)	61% (6)	68% (5)	35% (8)	86% (1)
6-Hemic, Lymphatic System, and Mediastinum	73% (4)	73% (5)	93% (1)	77% (3)	63% (7)	66% (6)	36% (8)	85% (2)
7-Digestive System	78% (3)	77% (5)	106% (1)	77% (4)	62% (7)	67% (6)	52% (8)	86% (2)
8-Urinary System and Male Genital	83% (2)	75% (4)	60% (7)	77% (3)	62% (6)	67% (5)	43% (8)	83% (1)
9-Gynecology and Obstetrics	91% (5)	91% (4)	86% (6)	81% (8)	94% (3)	95% (2)	109% (1)	84% (7)
10-Endocrine System	72% (5)	72% (4)	94% (1)	78% (3)	67% (7)	67% (6)	62% (8)	84% (2)
11-Nervous System	103% (1)	95% (3)	96% (2)	85% (5)	62% (7)	66% (6)	43% (8)	86% (4)
12-Eye Surgery	78% (5)	78% (6)	94% (1)	78% (4)	64% (8)	64% (7)	85% (2)	85% (3)
13-Ear Surgery	83% (2)	83% (3)	49% (7)	78% (4)	64% (6)	66% (5)	40% (8)	85% (1)
14-Radiology	79% (3)	79% (3)	92% (1)	79% (5)	60% (7)	60% (7)	72% (6)	86% (2)
15-Laboratory	79% (6)	79% (6)	101% (3)	86% (4)	105% (1)	105% (1)	64% (8)	83% (5)
16-Psychiatry	100% (2)	100% (1)	96% (3)	80% (5)	69% (7)	69% (6)	38% (8)	83% (4)
17-Dialysis	72% (4)	72% (4)	95% (1)	79% (3)	67% (6)	67% (6)	16% (8)	84% (2)
18-Gastroenterology	77% (4)	77% (4)	96% (1)	82% (3)	58% (7)	58% (7)	60% (6)	93% (2)
19-Ophthalmology and Vision Care	74% (4)	73% (5)	94% (1)	78% (3)	63% (7)	66% (6)	37% (8)	85% (2)
20-ENT (Otorhinolaryngology)	77% (3)	77% (4)	92% (1)	77% (5)	59% (8)	59% (7)	60% (6)	87% (2)
21-Cardiovascular System - Medical	82% (3)	82% (3)	92% (1)	77% (5)	60% (7)	60% (7)	66% (6)	86% (2)
22-Noninvasive Vascular Diagnostic Studies	81% (3)	81% (3)	90% (1)	79% (5)	59% (7)	59% (7)	70% (6)	89% (2)
23-Pulmonary	73% (4)	73% (4)	92% (1)	76% (3)	58% (6)	58% (6)	34% (8)	87% (2)
24-Allergy and Immunology	86% (4)	87% (3)	92% (1)	76% (5)	57% (7)	57% (6)	53% (8)	88% (2)
25-Neurology and Neuromuscular	73% (3)	73% (3)	76% (1)	66% (5)	48% (6)	48% (6)	40% (8)	76% (2)
26- Central Nervous System Assessment Tests	79% (3)	79% (2)	52% (8)	77% (4)	61% (6)	61% (5)	54% (7)	86% (1)
27-Chemotherapy Administration	83% (3)	83% (4)	90% (1)	76% (6)	58% (8)	58% (7)	79% (5)	87% (2)
28-Special Dermatological	72% (4)	72% (3)	93% (1)	76% (2)	58% (7)	58% (6)	28% (8)	58% (5)
29-Physical Medicine and Rehabilitation	77% (3)	77% (3)	90% (1)	76% (5)	64% (6)	64% (6)	46% (8)	85% (2)
30-Osteopathy, Chiropractic, and Other Medicine	79% (4)	72% (6)	92% (2)	73% (5)	62% (8)	62% (7)	137% (1)	84% (3)

Tables B1 through B3 in Appendix B depict numbers of primary care and specialty physicians per 10,000 populations in the United States, and by state. Maryland is ranked sixth in the nation.

V. Trauma Center Payment Issues

In 2003, SB 479 (Chapter 385 of the Acts of 2003) created a Trauma and Emergency Medical Fund, which is financed by motor vehicle registration surcharges. The Maryland Health Care Commission (MHCC) and the Health Services Cost Review Commission (HSCRC) have oversight responsibility for the fund. Based on the law, Maryland Medicaid is required to pay physicians 100 percent of the Medicare facility rates for the Baltimore region when they provide trauma care to Medicaid FFS and HealthChoice program enrollees. The enhanced Medicaid fees apply only to services rendered in trauma centers designated by the Maryland Institute for Emergency Medical Services Systems to patients who are placed on Maryland's Trauma Registry. Initially, the enhanced Medicaid fees were limited to trauma surgeons, critical care physicians, anesthesiologists, orthopedic surgeons, and neurosurgeons. However, HB 1164 (Chapter 484 of the Acts of 2006) extended the enhanced rates to any physician who provides trauma care to Medicaid beneficiaries. MHCC and HSCRC fully cover the additional outlay of general funds that the Maryland Medical Assistance program pays due to enhanced trauma fees (i.e., the state's share of the difference between current Medicare rates and Medicaid rates). MHCC pays physicians directly for uncompensated care and on-call services.

VI. Reimbursement for Oral Health Services

The Maryland Medicaid program covers dental benefits for children, pregnant women, and Rare and Expensive Case Management (REM) adult populations. In addition, former foster care children continue to receive dental services until they become 25. This benefit began January 2017. At this time, the Department does not reimburse for adult dental benefits; however, some of the MCOs cover these benefits from their own monies.[8]

Historically, the Maryland Medical Assistance program has paid low dental fees. Unlike fees for physician services, there is no federal public program (such as Medicare) that serves as a benchmark for oral health service fees. The American Dental Association (ADA) published a biennial survey that reported the average national and regional fees for approximately 165 common dental procedures and offered data for comparison.

During the 2003 session, the Maryland General Assembly allocated $7.5 million through budgetary language to increase Medicaid fees for dental procedures. Effective March 1, 2004, MCOs were required to reimburse their contracted providers at the ADA's then-current 50th percentile of charges for 12 restorative procedures. At the same time, Medicaid increased FFS rates to the ADA's 50th percentile levels for the 12 restorative procedures.

[8] The Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) is a required package of benefits for all Medicaid participants under the age of 21 years. While EPSDT mandates dental care coverage for children, federal law does not mandate any minimum requirements for adult dental coverage through Medicaid.

In June 2007, the Department convened the Dental Action Committee to increase access to dental care services for children of low income families in Maryland. The Dental Action Committee recommended increasing the dental reimbursement rates to the 50th percentile of the ADA's South Atlantic region charges for all dental procedures. Subsequently, SB 545 (Chapter 589 of the Acts of 2008) allocated $7 million in state funds ($14 million with matching federal funds) for increasing dental fees in FY 2009. The rate increase targeted preventive procedures and went into effect on July 1, 2008.

Based on the Dental Action Committee's recommendations, an administrative service organization (ASO) was formed to coordinate the provision of dental services for Medicaid beneficiaries. Currently, Scion Dental is the ASO for the Maryland Healthy Smiles Dental Program.

Fees for some dental procedures were streamlined and adjusted, effective July 1, 2009, to coincide with the provision of all Medicaid dental services through the ASO.

In FY 2015, the General Assembly allocated approximately $940,000 in state general funds ($2.15 million with matching federal funds) to increase fees for five dental procedures in January through June 2015. The annual equivalent of $4.3 million was earmarked for the following five procedures. Table 8 presents current Maryland Medicaid dental fees, compared with median ADA fees in 2013 for the five selected dental procedures for which fees increased in January 2015.

Table 8. Maryland Medicaid Dental Fees Compared with Median ADA Fees

Procedure Code	Description	Median ADA fees in 2013	Medicaid 2014 Fees	Medicaid 2015 Fees
D1208	Topical Application of Fluoride	$33.00	$21.60	$23.00
D1330	Oral Hygiene Instructions	$16.00	$0.00	$6.00
D2940	Protective Restoration	$100.00	$18.00	$50.00
D3120	Pulp Cap, Indirect	$70.00	$15.00	$35.00
D9941	Athletic Mouth-guard	$206.00	$40.00	$103.00

Table 9 shows Maryland Medicaid weighted average dental fees by specialty groups of procedures, before and after the fee increase, as percentages of the ADA's 50th percentile of charges.

Table 9. Average of Maryland Medicaid Dental Fees as a Percentage of the ADA's 50th Percentile of Charges, by Procedure Group, CYs 2014 and 2015

Procedure Group	2014 Average Fees	2015 Average Fees
D0100-D1999 Diagnostic & Preventive Procedures	57%	59%
D2000-D2999 Restorative Procedures	56%	57%
D3000-D3999 Endodontics	62%	64%
D4210-D6999 Periodontics & Prosthodontics	51%	51%

D7000-D7999 Oral and Maxillofacial Surgery	59%	59%
D8000-D9999 Orthodontics & Adjunctive General Services	32%	32%
All Procedures Combined	**54%**	**55%**

Table 10 compares Maryland Medicaid dental fees for selected high-volume procedures with the corresponding fees in Delaware, Virginia, West Virginia, Pennsylvania, and Washington, D.C. Numbers of claims in Maryland were used to calculate the weighted average rank of Maryland and its neighboring states' fees.

The ranks of states' weighted average fees are: Delaware (first), Washington, D.C. (second), Maryland (third), West Virginia (fourth), Virginia (fifth), and Pennsylvania (sixth). ADA fees correspond to CY 2013, and the states' fees correspond to CY 2015.

Table 10. Comparison of Maryland Medicaid and Neighboring States' 2015 Dental Fees

Procedure Code	Procedure Description	ADA	MD	DE	VA	WV	PA	DC
D0120	Periodic oral evaluation	$45	$29	$46	$20	$25	$20	$35
D0140	Limited oral evaluation, problem focus	$65	$43	$69	$25	$35	N/A	$50
D0145	Oral evaluation, pt < 3yrs	$55	$40	$63	$20	$25	$20	$40
D0150	Comprehensive oral evaluation	$73	$52	$81	$31	$35	$20	$78
D1110	Prophylaxis – adult (12 years of age and older)	$82	$58	$83	$47	$55	$36	$78
D1120	Dental prophylaxis child	$61	$42	$63	$34	$40	$30	$47
D1206	Topical fluoride varnish	$35	$25	$39	$21	$20	$18	$29
D1351	Dental sealant per tooth	$48	$33	$50	$32	$30	$25	$38
D7140	Extraction erupted tooth	$155	$103	$164	$69	$80	$65	$110
D9248	Nonintravenous conscious sedation	$170	$187	$295	$110	0	$184	0
Ranking		N/A	3	1	5	4	6	2

Table B4 in Appendix B depicts number of dentists and per 10,000 populations in the United States. Maryland ranks 7th in the nation.

VII. Physician Participation in the Maryland Medicaid Program

Physician claims and encounter data pertaining to FY 2002 (the year before the July 2002 fee increase) and FYs 2014 – 2017 were analyzed to determine the number of physicians who partially and fully participated in the Medicaid program.

Because of incurred but not reported (IBNR) claims, FY 2017 FFS claims and MCO encounter data were not complete. Consequently, they showed an insignificant decrease in the total number

of participating physicians in FY 2017 compared with FY 2016. This phenomenon was also observed in previous years. Therefore, FY 2016 data were used as the last year for comparison in Tables 11 – 13.

Tables 11 – 13 show the percentage changes in the numbers of participating physicians from all specialties (including primary care) who participated in the FFS program, MCO networks, and the Medicaid program overall. Physicians with fewer than 25 claims during each fiscal year are included in the data for all physicians, but are not shown separately. Physicians who submitted more than 25 claims, but treated fewer than 50 Medicaid patients, are considered partial participants in the Medicaid program. Physicians who treated at least 50 Medicaid patients during the year are considered full participants in the Medicaid program.

The data in Table 11 demonstrate significant increases in physician participation in the FFS program, MCO networks, and the Medicaid program overall between FYs 2002 and 2016.

Table 11. Percentage Changes in the Numbers of Participating Physicians of All Specialties, FY 2002 – 2016

	FFS	MCO Networks	Total Medicaid
Partial Participation	64.1%	52.9%	101.8%
Full Participation	137.7%	243.4%	214.0%
All Physicians	63.9%	109.6%	192.7%

Because some physicians participate in both FFS and MCO networks, the percentages of all physicians participating in the Medicaid program do not equal the sum of FFS and MCO network physicians. Notice the significant increases in the numbers of physicians who fully participate in the Medicaid FFS program and HealthChoice MCOs.

Similarly, examination of the data in Table 12 shows that, following the increase in reimbursement rates for E&M procedures in CYs 2013 and 2014, and as they remain above 90 percent of Medicare fees, physician participation increased between FYs 2014 and 2016.

Table 12. Percentage Change in the Number of Participating Physicians of All Specialties, FYs 2014 – 2016

	FFS	MCO Networks	Total Medicaid
Partial Participation	8.4%	1.7%	4.6%
Full Participation	29.8%	14.3%	16.2%
All Physicians	7.4%	3.7%	6.0%

The data in Table 12 show that physician participation in the FFS program and MCO networks increased between FYs 2014 and 2016. Furthermore, the numbers of physicians who fully participated in both FFS and MCO networks substantially increased. Table 13 shows that the increasing trend in total physician participation in the Medicaid program continued between FYs 2015 and 2016, especially among physicians who are full participants and treat 50 or more Medicaid patients. The 1.1 percent decrease among partial participants in the FFS program is a result of some previous partial participants deciding to fully participate in the Medicaid program.

Table 13. Percentage Change in the Number of Participating Physicians of All Specialties, FYs 2015 and 2016

	FFS	MCO Networks	Total Medicaid
Partial Participation	-1.1%	5.7%	3.4%
Full Participation	3.8%	2.7%	2.8%
All Physicians	2.7%	2.7%	3.1%

Although national data pertaining to previous years have shown that fewer physicians are providing services to higher numbers of Medicaid beneficiaries, the increase in Medicaid fees for E&M procedures to Medicare fee levels in CYs 2013 and 2014 offered a financial incentive for physicians to participate in the Maryland Medicaid program, resulting in a significant increase in the number of physicians fully participating in Medicaid. However, the increase in the number of participating physicians following Medicaid expansion under the ACA is partly the result of a substantial increase in the number of Medicaid beneficiaries.

Therefore, to separate the effects of the increase in fees on physician participation from the effects of the increase in Medicaid enrollment, we conducted an additional analysis in which we calculated the number of claims per enrollee for each year, beginning in FY 2002 (see Table 14). For this analysis, we excluded radiology and laboratory procedures for all years, because they may not be representative of patient access to physician services.

Table 14. Number of Claims per Medicaid Enrollee, FYs 2002 – 2016 [9]

Fiscal Year	Average Monthly Medicaid Enrollment	Number of Physician Claims and Encounters	Average Number of Claims Per Enrollee	Annual Percentage Increase in Claims Per Enrollee
2002	617,929	3,903,991	6.3	N/A
2003	652,414	4,274,666	6.6	3.7%
2004	669,021	4,758,155	7.1	8.5%
2005	687,269	4,816,418	7.0	-1.5%
2006	690,227	5,159,342	7.5	6.7%
2007	700,930	5,491,876	7.8	4.8%
2008	709,832	5,912,029	8.3	6.3%
2009	772,582	6,620,713	8.6	2.9%
2010	867,788	7,765,486	8.9	4.4%
2011	951,716	8,733,375	9.2	2.5%
2012	1,013,543	9,256,308	9.1	-0.5%
2013	1,066,815	9,771,057	9.2	0.3%
2014	1,181,231	10,725,539	9.1	-0.9%
2015	1,310,720	11,857,958	9.0	-0.4%

[9] The source of "Average Monthly Medicaid Enrollment" data used for this table is the Medicaid enrollment data maintained in the University of Maryland, Baltimore County Hilltop Institute's Decision Support System (DSS).

Fiscal Year	Average Monthly Medicaid Enrollment	Number of Physician Claims and Encounters	Average Number of Claims Per Enrollee	Annual Percentage Increase in Claims Per Enrollee
2016	1,278,996	11,428,621	8.9	-1.2%

N/A: Not Applicable

The continued increase in the average number of claims per enrollee shows that, as physician reimbursement rates increased in FY 2003 and subsequently during the FYs 2006 – 2009 period, the utilization of physician services by Medicaid enrollees increased steadily, from an average of 6.3 claims per enrollee in FY 2002 to an average of 8.9 claims per enrollee in FY 2016. This is a 41 percent increase in the utilization of physician services by Medicaid enrollees, which is a proxy for the increase in the participation of physicians in the Maryland Medicaid program and may be interpreted as an increase in the access of Medicaid enrollees to physician services. The average number of claims per enrollee has fluctuated between 8.9 and 9.2 since FY 2010.

The slight decrease in the average number of claims per enrollee in recent years is consistent with the trend in Maryland Medicaid reimbursement rates for E&M procedures used by most physicians. In 2013, the Medicaid reimbursement rate for E&M procedures was highest and equal to Medicare rates in Maryland. In 2014, Medicare E&M fees declined. In 2015, Maryland Medicaid reimbursement rates for E&M procedures decreased to 87 percent of Medicare rates. For 2016, Maryland Medicaid E&M rates increased to approximately 92 percent of Medicare rates for the Baltimore region. Another possible explanation for the minor decline in the number of claims per enrollee is the recent decline in Medicaid enrollment.

Comparison of Access to Medical Care for Medicaid and Private Coverage

In a report published in November 2012, the U.S. Government Accountability Office (GAO) analyzed two national surveys—the National Health Interview Survey and the Medical Expenditure Panel Survey—for 2008 and 2009 to evaluate the extent to which Medicaid beneficiaries reported difficulties obtaining medical care. These national surveys rely on information reported by individuals who voluntarily participate in the surveys. The GAO compared the results for Medicaid with private/commercial insurance coverage.

The GAO found that:

> Beneficiaries covered by Medicaid for a full year reported low rates of difficulty obtaining necessary medical care and prescription medicine, similar to those with private insurance coverage for a full year. In calendar years 2008 and 2009, approximately 3.7 percent of Medicaid beneficiaries enrolled for a full year, and 3 percent of individuals enrolled in private insurance for a full year reported difficulties obtaining needed medical care; the difference between these two groups was not statistically significant. In addition, 2.7 percent of full-year Medicaid beneficiaries reported difficulty obtaining needed prescription medicines, and about 2.4 percent of individuals with full-year private insurance reported the same

issue—also not statistically significant (United States Government Accountability Office, November 2012).

However, 5.4 percent of full-year Medicaid beneficiaries (children and adults), compared with 3.7 percent of individuals with full year private insurance coverage, reported experiencing difficulty obtaining necessary dental care. (United States Government Accountability Office, November 2012).[10]

A study published in the *Journal of General Internal Medicine* used descriptive and multivariate analysis to examine Medical Expenditure Panel Survey data from 2005-2008 and concluded that Medicaid is more effective at providing access to affordable health care coverage than either private insurance or Medicare. Given the fact that nationally more than one-third of low-income adults were underinsured during this time, this study highlights the importance of safety net programs such as Medicaid. The authors of this study (Magge, Cabral, Kazis, and Sommers) indicate that, in a comparison of different insurance groups, Medicaid beneficiaries were less likely to be underinsured than privately insured adults were (2013).

A study published in the American Journal of Public Health examined the effects of expanding eligibility to Medicaid and the State Children's Health Insurance Program (SCHIP) on trends of national childhood (i.e., children aged 1 – 17 years) mortality, Howell, Decker, Hogan, Yemane, & Foster (2010) analyzed childhood mortality by state and age. The researchers used the National Center for Health Statistics' multiple cause of death files over 20 years, from 1985 to 2004. They found that childhood mortality continued to decline in the United States. In fact, this decline was substantial, and expanded Medicaid and SCHIP eligibility was a significant factor in the decline in mortality.

VIII. Plan for the Future

The Department remains dedicated to ensuring that physicians are reimbursed equitably for their services. The provision of the ACA that required parity of reimbursement rates for E&M procedures with the rates paid by Medicare expired at the end of 2014.

Although Maryland Medicaid reimbursement rates for E&M services have decreased compared with Medicare rates, the State has allocated funds to maintain them at approximately 92 percent of Medicare reimbursement rates. Furthermore, the Department will continue to monitor provider network adequacy to ensure that patients' access to care is not compromised.

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) repealed the sustainable growth rate formula used for the annual update of Medicare physician fees under the RBRVS.

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[10] As noted above, while EPSDT mandates dental care coverage for children, federal law does not mandate any minimum requirements for adult dental coverage through Medicaid. The Maryland Medicaid program covers dental benefits for children, pregnant women, and Rare and Expensive Case Management (REM) adult populations. In addition, former foster care children continue to receive dental services until they become 25. This benefit began January 2017. At this time, the Department does not reimburse for adult dental benefits; however, some of the MCOs cover these benefits from their own monies.

MACRA also will replace Medicare's multiple quality of care reporting programs with a Merit-Based Incentive Payment System program that will reward physicians for providing high-quality, high-value health care, as well as for participating in new payment and delivery models to improve the efficiency of care while preserving the FFS system. Beginning in 2019, MACRA will provide bonuses for physicians who score well in the Merit-Based Incentive Payment System's (MIPS) quality reporting program (American Medical Association, May 2015). The Department strongly supports federal efforts to enhance the payment system and will continue to monitor them closely.

Appendix A:
Medicare Resource-Based Relative Value Scale and Anesthesia Reimbursement

Resource-Based Relative Value Scale

Medicare payments for physician services are made according to a fee schedule. The Medicare Resource-Based Relative Value Scale (RBRVS) methodology relates payments to the resources and skills that physicians use to provide services. There are three components that determine the relative weight of each procedure: physician work, practice expense, and malpractice expense. A geographic cost index and conversion factor are used to convert the weights to fees.

The Centers for Medicare & Medicaid Services (CMS) determines the associated relative value units (RVUs) and various payment policy indicators needed for payment adjustment of approximately 10,000 physician procedures. The RVU weights reflect the resource requirements of each procedure performed by physicians. Medicare fees are adjusted depending on the site in which each procedure is performed. For example, Medicare fees for some procedures are lower if they are performed in facilities (e.g., hospitals and skilled nursing facilities) than if they are performed in non-facilities (e.g., offices), where physicians must pay for practice expenses. The implementation of RBRVS methodology in 1992 resulted in increased payments for office-based (non-facility) procedures and reduced payments for hospital-based procedures.

Medicare physician fees are adjusted to reflect the variations in practice costs for different areas. A geographic practice cost index (GPCI) has been established for every Medicare payment locality for each of the three components of a procedure's RVUs (i.e., physician work, practice expense, and malpractice expense). Each locality's GPCIs are used to calculate fees by multiplying the RVU for each component by the GPCI for that component. The resulting weights are multiplied by a conversion factor to determine the payment for each procedure.

Previously, CMS updated the conversion factor based on the sustainable growth rate system, which tied the updates to growth in the national economy. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) repealed the sustainable growth rate formula. Under MACRA, the annual update of the conversion factor for physician fee schedules is 0.5 percent for July 2015 through 2019 and 0 percent for 2020 through 2025. MACRA requires the use of two separate conversion factors for each year beginning with 2026: one for services provided by physicians participating in an alternative payment model (APM conversion factor), and another for services provided by other physicians. The annual update for 2026 and subsequent years will be 0.75 percent for physicians who participate in the alternative payment model and 0.25 percent for all other physicians.

Payment for Anesthesia Procedures

Prior to December 1, 2003, reimbursement for anesthesia services in the Maryland Medicaid program was based on a percentage of the surgical fee. The program in general did not use the anesthesia CPT codes, but rather the surgical CPT codes with a modifier. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) required that national standard code sets be used. In late 2003, the Medicaid program complied with the federal standards and began

transitioning from a fixed anesthesia rate for each surgical procedure to Medicare's national methodology.

Medicare payments for anesthesia services represent a departure from RBRVS methodology. Medicare's methodology recognizes anesthesia time as the key element for determining the payment rate. The anesthesia time for any additional procedures performed during the same operative session is added to the time for the primary procedure. This time is then converted to units, with 15 minutes equal to one unit.

More than 5,000 surgical procedure codes exist, but there are fewer than 300 anesthesia codes. Each anesthesia procedure code has a non-variable (fixed) number of base units. Similar to RBRVS, the base units represent the difficulty associated with a given group of procedures. The base units for the selected anesthesia codes are added to the units related to anesthesia time, and the result is multiplied by a conversion factor to determine the payment amount. The Maryland Medicaid program calculates the payment slightly differently, but the net result is the same.

Appendix B:
Number of Physicians and Dentists in Each State and per 10,000 Population in CY 2017

Source: All data for numbers of physicians and dentists in this appendix were downloaded from the website of the Kaiser Family Foundation, State Health Facts:
https://www.kff.org/

Annual Estimates of the Resident Population for the United States in 2016 are from the Census Bureau, U.S. Department of Commerce. They were downloaded from the following website on November 11, 2017:
https://www.census.gov/data/tables/2016/demo/popest/state-total.html

Physician data include all active allopathic and osteopathic physicians. Data in the last column of Table B.1 are based on numbers of physicians in patient care per 10,000 population. Maryland ranks sixth in the number of physicians per 10,000 population among all states and the District of Columbia.

Dentist data include all professionally-active dentists. Maryland has the seventh highest number of dentists per 10,000 people among all states.

Table B.1. Number of Physicians by State in CY 2017, Ranked by Number per 10,000 Population

Rank	Geographic Location	Primary Care Physicians	Specialist Physicians	Total Physicians	Active Physicians Per 10,000 Population
	United States	**443,962**	**479,346**	**923,308**	**28.6**
1	District of Columbia	2,842	3,682	6,524	95.8
2	Massachusetts	14,419	18,059	32,478	47.7
3	Rhode Island	2,236	2,344	4,580	43.4
4	New York	37,245	44,165	81,410	41.2
5	Connecticut	6,347	7,791	14,138	39.5
6	**Maryland**	**10,281**	**12,432**	**22,713**	**37.8**
7	Pennsylvania	22,256	24,033	46,289	36.2
8	Michigan	16,969	18,117	35,086	35.3
9	Vermont	1,029	1,089	2,118	33.9
10	Ohio	17,921	20,669	38,590	33.2
11	Maine	2,297	2,073	4,370	32.8
12	New Jersey	13,699	14,224	27,923	31.2
13	Illinois	20,114	19,368	39,482	30.8
14	Minnesota	8,181	8,715	16,896	30.6
15	Missouri	8,753	9,897	18,650	30.6
16	Delaware	1,386	1,490	2,876	30.2
17	New Hampshire	1,885	2,102	3,987	29.9
18	West Virginia	2,636	2,499	5,135	28.0
19	Wisconsin	7,784	8,383	16,167	28.0
20	Washington	9,901	10,240	20,141	27.6
21	Nebraska	2,690	2,555	5,245	27.5
22	Oregon	5,478	5,659	11,137	27.2
23	Tennessee	8,386	9,583	17,969	27.0
24	Louisiana	5,786	6,706	12,492	26.7
25	California	50,046	53,880	103,926	26.5
26	North Carolina	12,456	13,689	26,145	25.8
27	Virginia	10,747	10,789	21,536	25.6
28	Florida	25,559	26,777	52,336	25.4
29	New Mexico	2,694	2,575	5,269	25.3
30	Kansas	3,837	3,499	7,336	25.2
31	Iowa	4,112	3,778	7,890	25.2
32	Colorado	6,801	6,857	13,658	24.7
33	Kentucky	5,044	5,893	10,937	24.6

Rank	Geographic Location	Primary Care Physicians	Specialist Physicians	Total Physicians	Active Physicians Per 10,000 Population
34	North Dakota	1,016	835	1,851	24.4
35	Hawaii	1,766	1,713	3,479	24.4
36	Arizona	8,042	8,750	16,792	24.2
37	Alaska	985	809	1,794	24.2
38	Indiana	7,754	8,204	15,958	24.1
39	South Carolina	5,953	5,978	11,931	24.0
40	Alabama	5,499	5,800	11,299	23.2
41	Georgia	11,639	11,717	23,356	22.7
42	Oklahoma	4,555	4,299	8,854	22.6
43	Arkansas	3,267	3,390	6,657	22.3
44	South Dakota	994	888	1,882	21.7
45	Texas	28,760	31,037	59,797	21.5
46	Montana	1,119	1,106	2,225	21.3
47	Mississippi	3,024	3,171	6,195	20.7
48	Utah	2,807	3,375	6,182	20.3
49	Wyoming	599	532	1,131	19.3
50	Nevada	2,848	2,826	5,674	19.3
51	Idaho	1,518	1,304	2,822	16.8

Table B.2. Primary Care Physicians by Field, CY 2017

Geographic Location	Internal Medicine	Family Medicine/ General Practice	Pediatrics	Obstetrics and Gynecology	Geriatrics	Total Primary Care
United States	**182,077**	**130,186**	**80,564**	**49,841**	**1,294**	**443,962**
Alabama	2,167	1,752	948	624	8	5,499
Alaska	207	546	134	97	1	985
Arizona	3,128	2,574	1,381	914	45	8,042
Arkansas	820	1,583	571	285	8	3,267
California	20,408	14,207	9,754	5,559	118	50,046
Colorado	2,326	2,584	1,099	773	19	6,801
Connecticut	3,503	735	1,214	886	9	6,347
Delaware	457	370	404	152	3	1,386
District of Columbia	1,453	307	719	357	6	2,842
Florida	10,728	7,754	4,404	2,576	97	25,559
Georgia	4,608	3,208	2,256	1,545	22	11,639
Hawaii	728	464	312	259	3	1,766
Idaho	357	858	151	149	3	1,518
Illinois	8,824	5,587	3,455	2,213	35	20,114
Indiana	2,527	3,156	1,218	832	21	7,754
Iowa	1,132	2,061	590	317	12	4,112
Kansas	1,102	1,692	644	393	6	3,837
Kentucky	1,822	1,759	859	594	10	5,044
Louisiana	2,262	1,640	1,100	777	7	5,786
Maine	755	1,019	315	193	15	2,297
Maryland	5,325	1,647	2,057	1,220	32	10,281
Massachusetts	8,411	1,813	2,881	1,284	30	14,419
Michigan	6,798	5,575	2,407	2,139	50	16,969
Minnesota	3,003	3,290	1,152	715	21	8,181
Mississippi	1,087	1,057	486	392	2	3,024
Missouri	3,493	2,601	1,625	991	43	8,753
Montana	331	555	118	113	2	1,119
Nebraska	848	1,168	412	259	3	2,690
Nevada	1,297	842	398	305	6	2,848
New Hampshire	814	548	315	201	7	1,885
New Jersey	6,502	2,505	2,949	1,687	56	13,699
New Mexico	906	1,038	487	261	2	2,694
New York	19,101	5,876	7,867	4,329	72	37,245
North Carolina	4,710	3,744	2,383	1,560	59	12,456
North Dakota	314	549	99	51	3	1,016
Ohio	7,206	5,093	3,554	1,987	81	17,921
Oklahoma	1,238	2,161	679	466	11	4,555

Geographic Location	Internal Medicine	Family Medicine/ General Practice	Pediatrics	Obstetrics and Gynecology	Geriatrics	Total Primary Care
Oregon	2,317	1,838	738	570	15	5,478
Pennsylvania	9,526	6,685	3,494	2,409	142	22,256
Rhode Island	1,227	253	503	250	3	2,236
South Carolina	1,973	2,184	1,043	734	19	5,953
South Dakota	313	483	117	79	2	994
Tennessee	3,360	2,387	1,610	1,019	10	8,386
Texas	10,248	9,034	5,690	3,695	93	28,760
Utah	866	971	622	344	4	2,807
Vermont	381	349	194	104	1	1,029
Virginia	3,959	3,461	2,036	1,261	30	10,747
Washington	3,387	4,099	1,514	873	28	9,901
West Virginia	889	1,141	353	247	6	2,636
Wisconsin	2,798	3,034	1,197	742	13	7,784
Wyoming	135	349	56	59	0	599

Note: Physician data include all allopathic and osteopathic physicians.

Table B.3. Specialist Physicians by Field, CY 2017

Location	Psychiatry	Surgery	Anesthesiology	Emergency Medicine	Radiology	Cardiology	Oncology	Endocrinology, Diabetes, and Metabolism	All Other Specialties	Total
United States	**51,403**	**48,921**	**46,971**	**48,851**	**44,643**	**30,271**	**18,055**	**7,254**	**182,977**	**479,346**
Alabama	479	700	550	399	622	385	208	65	2,392	5,800
Alaska	104	79	81	122	64	36	12	7	304	809
Arizona	836	910	1,031	982	822	501	242	96	3,330	8,750
Arkansas	333	352	322	294	346	186	125	40	1,392	3,390
California	6,841	4,965	5,682	5,314	4,666	3,003	1,667	741	21,001	53,880
Colorado	759	644	822	861	576	330	211	92	2,562	6,857
Connecticut	1,136	747	612	686	742	561	303	197	2,807	7,791
Delaware	160	162	93	200	190	103	54	12	516	1,490
District of Columbia	531	378	261	306	274	256	169	80	1,427	3,682
Florida	2,144	2,632	2,674	2,615	2,541	2,004	1,000	382	10,785	26,777
Georgia	1,166	1,344	1,161	1,261	1,118	762	416	150	4,339	11,717
Hawaii	272	156	167	202	147	70	34	20	645	1,713
Idaho	106	148	109	164	155	48	28	10	536	1,304
Illinois	1,917	1,893	1,948	2,283	1,863	1,289	717	332	7,126	19,368
Indiana	640	806	1,118	873	836	534	310	130	2,957	8,204
Iowa	309	487	440	309	382	245	130	35	1,441	3,778
Kansas	416	425	361	255	322	207	121	40	1,352	3,499
Kentucky	544	721	582	622	516	347	181	66	2,314	5,893
Louisiana	576	745	548	682	545	441	224	88	2,857	6,706
Maine	293	262	201	284	185	120	65	15	648	2,073
Maryland	1,592	1,152	1,122	880	1,023	775	600	234	5,054	12,432
Massachusetts	2,642	1,663	1,639	1,480	1,821	1,424	995	423	5,972	18,059
Michigan	1,445	1,953	1,492	2,823	1,813	978	601	210	6,802	18,117

Location	Psychiatry	Surgery	Anesthesiology	Emergency Medicine	Radiology	Cardiology	Oncology	Endocrinology, Diabetes, and Metabolism	All Other Specialties	Total
Minnesota	782	904	642	832	978	647	367	160	3,403	8,715
Mississippi	262	382	282	330	304	179	111	44	1,277	3,171
Missouri	940	1,028	1,032	973	1,013	622	372	168	3,749	9,897
Montana	101	127	139	127	113	54	29	7	409	1,106
Nebraska	253	305	310	200	252	171	91	36	937	2,555
Nevada	258	273	373	358	254	175	77	32	1,026	2,826
New Hampshire	251	241	208	206	175	142	82	26	771	2,102
New Jersey	1,569	1,361	1,516	1,338	1,194	1,131	524	280	5,311	14,224
New Mexico	357	242	247	333	210	128	76	37	945	2,575
New York	6,382	3,925	3,938	3,830	3,684	2,858	1,913	800	16,835	44,165
North Carolina	1,492	1,442	1,068	1,492	1,276	883	554	190	5,292	13,689
North Dakota	119	131	70	65	94	34	30	13	279	835
Ohio	1,628	2,205	1,831	2,439	1,806	1,346	773	278	8,363	20,669
Oklahoma	399	444	486	524	398	227	133	42	1,646	4,299
Oregon	605	636	637	660	474	256	180	80	2,131	5,659
Pennsylvania	2,492	2,757	2,154	2,751	2,361	1,779	1,027	376	8,336	24,033
Rhode Island	260	268	119	343	195	154	124	46	835	2,344
South Carolina	678	748	554	660	538	329	179	79	2,213	5,978
South Dakota	89	112	63	51	100	52	28	8	385	888
Tennessee	752	1,099	833	743	963	622	410	134	4,027	9,583
Texas	2,777	3,297	3,569	2,827	2,890	1,938	1,239	431	12,069	31,037

Location	Psychiatry	Surgery	Anesthesiology	Emergency Medicine	Radiology	Cardiology	Oncology	Endocrinology, Diabetes, and Metabolism	All Other Specialties	Total	
Utah	273	289	405	391	298	162	86	33	1,438	3,375	
Vermont	179	124	100	84	103	63	36	14	386	1,089	
Virginia	1,225	1,072	1,005	1,188	1,089	644	330	188	4,048	10,789	
Washington	990	984	1,194	1,034	1,055	485	456	117	3,925	10,240	
West Virginia	230	297	199	308	231	133	82	46	973	2,499	
Wisconsin	767	836	921	794	976	434	325	120	3,210	8,383	
Wyoming	52	68	60	73	50	18	8	4	199	532	

Table B.4. Number of Dentists by State in CY 2017,
Ranked by Number per 10,000 Population

Rank	Geographic Area	Total Dentists	Dentists Per 10,000 Population
	United States	**186,202**	**5.8**
1	District of Columbia	611	9.0
2	Massachusetts	5,450	8.0
3	New Jersey	6,958	7.8
4	California	29,255	7.5
5	New York	14,200	7.2
6	Connecticut	2,548	7.1
7	**Maryland**	**4,114**	**6.8**
8	Hawaii	971	6.8
9	Alaska	499	6.7
10	Washington	4,847	6.7
11	Colorado	3,638	6.6
12	Illinois	8,238	6.4
13	Virginia	5,082	6.0
14	Nebraska	1,143	6.0
15	Pennsylvania	7,592	5.9
16	Utah	1,786	5.9
17	New Hampshire	772	5.8
18	Michigan	5,598	5.6
19	Montana	585	5.6
20	Vermont	348	5.6
21	Kentucky	2,463	5.6
22	Minnesota	2,962	5.4
23	Arizona	3,605	5.2
24	Wisconsin	2,966	5.1
25	Idaho	861	5.1
26	North Dakota	379	5.0
27	Texas	13,913	5.0
28	Florida	10,267	5.0
29	Nevada	1,452	4.9
30	Ohio	5,727	4.9
31	Rhode Island	517	4.9
32	North Carolina	4,894	4.8
33	Wyoming	282	4.8
34	Tennessee	3,187	4.8
35	New Mexico	993	4.8
36	Iowa	1,487	4.7
37	South Dakota	405	4.7

Rank	Geographic Area	Total Dentists	Dentists Per 10,000 Population
38	Oklahoma	1,824	4.6
39	Kansas	1,350	4.6
40	South Carolina	2,263	4.6
41	Louisiana	2,134	4.6
42	Missouri	2,754	4.5
43	Maine	600	4.5
44	West Virginia	817	4.5
45	Indiana	2,913	4.4
46	Georgia	4,494	4.4
47	Oregon	1,745	4.3
48	Alabama	2,020	4.2
49	Delaware	395	4.1
50	Mississippi	1,166	3.9
51	Arkansas	1,132	3.8

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