

# RUPRI Center for Rural Health Policy Analysis

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## **Differences in the Merit-based Incentive Payment System (MIPS) Performance of Clinicians in Metropolitan and Nonmetropolitan Counties in 2018**

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### **Purpose**

The Merit-based Incentive Payment System (MIPS) is a pay-for-performance system for clinicians under the Medicare Quality Payment Program (QPP) designed to reward clinicians providing higher quality of care and lower costs. MIPS rewarded clinicians in 2020 based on their 2018 performance score that is a weighted average of scores across four domains: quality, cost, promoting interoperability (PI), and improvement activities (IA). Policymakers are concerned that rural clinicians in small practices, and clinicians who serve a higher proportion of racial/ethnic minorities, may struggle to perform well in the MIPS program. The purpose of this brief is to describe rural clinician performance in MIPS in 2018, testing the supposition that they did not do as well as their urban counterparts. Rural-urban comparisons include MIPS performance scores, payment adjustments, risk-adjusted standardized Medicare Spending Per Beneficiary (MSPB), and 10 most frequently reported MIPS measures. These findings are further parsed by practice size and by the proportion of racial/ethnic minorities (Black, Hispanic, Asian/Pacific Islander, Native American, or other) served.

### **Key Findings**

- There were no meaningful differences between nonmetropolitan and metropolitan clinicians in overall MIPS performance scores in 2018 (86.9 vs. 87.0) and proportions of clinicians that had their Medicare payments reduced in 2020 due to their performance on MIPS (2.0 percent vs. 2.0 percent).
- However, a slightly smaller proportion of nonmetropolitan clinicians received an increase in their payments due to the exceptional performance on MIPS (83.8 percent vs. 84.3 percent) compared to metropolitan clinicians.
- About 23.3 percent of metropolitan clinicians and 21.9 percent of nonmetropolitan clinicians in solo practices had reductions in their Medicare payments in 2020 due to their MIPS performances in 2018.
- Nonmetropolitan clinicians performed better in the cost category of MIPS performance assessment (76.5 vs. 75.2) and had a lower total risk-adjusted MSPB than metropolitan clinicians (\$182.1 vs. \$202.7) indicating that nonmetropolitan clinicians have lower Medicare spending for similar beneficiaries.
- Among clinicians serving a high proportion of minority Medicare beneficiaries, fewer nonmetropolitan than metropolitan clinicians received an exceptional performance payment adjustment (78.2 percent vs. 81.1 percent).
- The top 10 most frequently reported measures for Quality, PI, and IA were similar for metropolitan and nonmetropolitan clinicians.



expressed in this policy brief are those of the authors and no endorsement by FORHP, HRSA, HHS is intended or should be inferred.

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## Background

The MIPS, part of the QPP, is a Medicare pay-for-performance payment system designed to reward clinicians for providing high clinical care quality and lower costs of care. Clinicians serving Medicare beneficiaries are required to participate in the MIPS program if they are a MIPS eligible clinician type<sup>i</sup> and exceed certain billing and patient volume thresholds.<sup>1</sup> In 2018, MIPS clinicians received an overall score that is a weighted average score based on their performance across four domains: quality [50 percent], cost [10 percent], promoting interoperability [(25 percent), and improvement activities [15 percent]].<sup>2</sup> The overall performance scores in 2018 were used for payment adjustment in 2020: exceptional [70-100 points], positive [15.01-69.99 points], neutral [15 points], or negative [less than 15 points].<sup>3</sup> For the quality domain, clinicians were allowed to select measures from a list of over 200 measures. However, clinicians in small, rural practices often struggle with the implementation of pay-for-performance programs because of few resources, inadequate support, and lack of technical infrastructure needed to report these measures.<sup>4</sup>

Prior studies have reported that the performance of MIPS participants varied by patient and practice characteristics. Clinicians practicing in rural areas, clinicians with smaller practice sizes, and clinicians not affiliated with a health system had worse performance under the MIPS program.<sup>5-12</sup> Similarly, MIPS clinicians with a higher social-risk caseload and those who practiced in areas with high proportions of uninsured and Medicaid residents had worse performance.<sup>7-9,11</sup> Several studies, including a report on first-year MIPS performance by CMS, suggest that the overall performance score for clinicians in rural areas (85.99) was comparable to the national average (86.96) but that rural clinicians in small practices had a considerably lower average score than the national average (65.69).<sup>6,10,12</sup> However, additional study is needed to assess whether there are meaningful differences in MIPS performance between nonmetropolitan and metropolitan clinicians with similar characteristics (e.g., practice size and/or population demographics) to ensure that all clinicians have equal opportunities to perform well in the MIPS.

## Methods

We used several publicly available datasets to obtain information on MIPS performance, clinician and patient characteristics, and rurality. First, we used *2018 Clinician Public Reporting: Overall MIPS Performance* data to obtain MIPS performance scores. Second, we used *2018 Public Reporting: MIPS Measures and Attestations* for individual clinicians and groups to obtain information on MIPS measures reported by clinicians. Third, we obtained information about clinician characteristics, beneficiary characteristics, and Medicare payment amounts stratified by drugs and medical services using the *Medicare Physician and Other Supplier Aggregate Reports and Physician and Other Supplier Public Use File* (PUF). We merged these datasets using the clinician Taxpayer Identification Number/National Provider Identifier (TIN/NPI). Finally, we merged ZIP codes from the PUF with the 2010 Rural-Urban Commuting

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<sup>i</sup> Clinicians eligible for MIPS include physicians, osteopathic practitioners, chiropractors, physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, physical therapists, occupational therapists, clinical psychologists, qualified speech-language pathologists, qualified audiologists, registered dietitians or nutrition professionals, clinical social workers, and certified nurse midwives.

Area (RUCA) codes to categorize clinicians as nonmetropolitan (RUCA code: 4-10) or metropolitan (RUCA code: 1-3).<sup>13</sup>

We descriptively summarized the MIPS performance, risk-adjusted standardized MSPB<sup>ii</sup>, and the 10 most frequently reported measures for each MIPS performance category for metropolitan and nonmetropolitan clinicians. We calculated risk-adjusted standardized MSPB for total spending, medical services spending, and drug spending using ordinary least squares (OLS) regressions, adjusting for the hierarchical condition category (HCC) risk score, following the steps released by CMS.<sup>14,iii</sup> Lower MSPB implies better performance in the cost category of MIPS performance assessment.<sup>15</sup> We further stratified clinicians by practice size based on the number of clinicians: large (more than 15), four groups of small (11-15, 6-10, 2-5), and solo (1). We also classified clinicians by the proportion of racial/ethnic minorities served: low (1<sup>st</sup> quintile), mid (2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> quintiles), and high (5<sup>th</sup> quintile). We used the proportion of beneficiaries identified as Black, Hispanic, Asian/Pacific Islander, Native American, or other to determine the proportion of racial/ethnic minorities served.<sup>16,17</sup> We examined statistical differences across groups using one-way ANOVA for continuous variables and Chi-square tests for categorical variables.

## Results

The study sample included 887,081 clinicians participating in the MIPS program, with 11.6 percent practicing in nonmetropolitan areas. Maximum scores for overall MIPS performance as well as cost and PI domain were 100, whereas the maximum score in the IA domain was 40 points. In 2018, the MIPS average overall performance score was 87.0. Average category-specific scores were the highest for PI (90.8 out of 100) and lowest for cost (75.3 out of 100). Almost all MIPS clinicians (97.5 percent) received positive payments, with 84.2 percent receiving exceptional performance payments, and only 2 percent of MIPS clinicians having their payments reduced. There were no meaningful differences between nonmetropolitan and metropolitan clinicians in overall performance scores (86.9 vs. 87.0) and proportions of clinicians with reduced payments (2.0 percent vs. 2.0 percent). However, a slightly smaller percentage of nonmetropolitan than metropolitan clinicians received exceptional performance payments (83.8 percent vs. 84.3 percent). Nonmetropolitan clinician average risk-adjusted standardized MSPB was less than that for metropolitan clinicians (\$182.1 vs. \$202.7) suggesting that nonmetropolitan clinicians receive less than metropolitan clinicians for similar beneficiaries. **[Table 1]**

The performance of MIPS clinicians differed by practice size. Clinicians in large group practices had a considerably higher average overall score compared to solo practices (90.3 vs. 55.4), with the largest difference observed for quality and PI scores. Similarly, 88.2 percent of clinicians in large group practices received exceptional

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<sup>ii</sup> CMS uses payment standardization for all services covered by Medicare Part A, Part B, and Part D programs.

<sup>iii</sup> First, we calculate standard payment per beneficiary; second, we calculate expected payment using OLS adjusting for HCC risk score; third, we exclude outliers based on residuals (below 1st or above 99th percentile) and renormalize the expected payment; fourth, we calculate risk adjusted payment ratio by dividing the standard payment per beneficiary by the expected payment per beneficiary; fifth, we calculate national average payment per beneficiary; last, we calculate risk adjusted standardized Medicare payment by multiplying national average payment per beneficiary and the risk adjusted payment ratio.

performance payments compared to only 47.8 percent for solo practices. About 23.1 percent of clinicians in solo practices had their payments reduced compared to only 0.1 percent for clinicians in large group practices. Among small group practices with 2-15 clinicians, MIPS performance scores varied by practice size, but only a small proportion of clinicians had their payments reduced across all groups (0.1 percent - 0.2 percent).

**[Table 2]**

Nonmetropolitan clinicians in solo practices had higher average cost score (69.0 vs. 66.6) and quality score (53.1 vs. 51.8) but a lower average PI score (50.5 vs. 52.0) than their metropolitan counterparts. A lower percentage of clinicians in solo practices in nonmetropolitan areas (21.9 percent vs. 23.3 percent) had their payments reduced than those in metropolitan areas. Nonmetropolitan clinicians in large group practices performed slightly better in the cost category (77.6 vs. 75.9) than those in metropolitan areas. **[Table 3]**

Clinicians serving the highest percentage (5<sup>th</sup> quintile) of minority beneficiaries received lower final scores (84.3 vs. 85.9) and were less likely to receive exceptional performance payments (81.0 percent vs. 82.7 percent) compared to clinicians serving the lowest percentage (1<sup>st</sup> quintile) of minority beneficiaries. However, clinicians serving the highest percentage of minority beneficiaries were also less likely to have their payments reduced (2.6 percent vs. 3.4 percent) than clinicians serving the lowest percentage of minority beneficiaries. Nonmetropolitan clinicians serving the highest percentage of minority beneficiaries received lower total scores (82.8 vs. 84.4) and were less likely to receive exceptional performance payments (78.2 percent vs. 81.1 percent) compared to metropolitan clinicians serving the highest percentage of minority beneficiaries. **[Table 4]**

The most frequently reported quality measures included preventive measures such as tobacco use screening, BMI screening, medication documentation, pneumonia vaccination, and colorectal cancer screening. Metropolitan and nonmetropolitan clinicians were likely to report similar measures across different MIPS categories.

**[Table 5]**

## **Discussion**

This study compared clinicians' MIPS performance in 2018 based on their practice location, size, and minority population proportion. We found that the overall performance in the MIPS program was comparable for metropolitan and nonmetropolitan clinicians. However, a smaller proportion of nonmetropolitan clinicians were likely to receive exceptional performance payments. Most of the clinicians receiving reduced payments were in solo practice in both metropolitan and nonmetropolitan areas. Although the participation rate is high for eligible clinicians, many clinicians in rural areas such as those providing services in rural health clinics and critical access hospitals may be exempt from MIPS.

Overall MIPS performance scores for metropolitan and nonmetropolitan clinicians were largely similar in our study, a finding consistent with scores reported by CMS.<sup>12</sup> Our findings on differences in MIPS performance by practice size were also consistent with prior studies.<sup>6,10,12</sup> However, our analyses showed that clinicians in solo practices were driving the differences in MIPS performance disparity between large and small practices. In our study, approximately 82.6 percent of providers in metropolitan areas

were in large practices compared to 80.3 percent in nonmetropolitan areas, but the proportion of solo practices were similar for nonmetropolitan (8.3 percent) and metropolitan (8.1 percent) areas. Studies have suggested that unaffiliated clinicians and those in smaller practices might not be equipped with the resources and technical infrastructure necessary for better performance in programs like MIPS.<sup>5-7</sup> Moreover, rural clinicians may have additional limitations in their technical, financial, and infrastructure capabilities, putting them at a greater disadvantage. However, our analysis suggests that MIPS performance is largely similar across practice sizes between nonmetropolitan and metropolitan clinicians except that metropolitan clinicians are generally more likely to receive exceptional performance payments.

Prior studies suggest that clinicians serving a higher percentage of minority beneficiaries are likely to perform poorly in programs like MIPS.<sup>8,9</sup> Consistent with the literature, we found that clinicians serving a high proportion of minorities were less likely to get exceptional performance payments but were also less likely to have their payments reduced under MIPS.

Beginning in 2023, MIPS participating clinicians are encouraged to report MIPS Value Pathways (MVPs) instead of the traditional MIPS measures. MVP was developed to streamline the traditional MIPS program with a reduced set of measures and improvement activities that are more connected in their assessment of quality of care.<sup>18</sup> With several changes in the MIPS program expected in the years ahead, it is unclear how practice sizes, patient case-mix, and metropolitan status will affect clinicians' performance in MIPS. Starting in the payment year 2022 (for the performance year 2020), MIPS added the "complex patient bonus" to the MIPS final score to adjust for patient medical and social complexity.<sup>19</sup> Specifically, medical complexity is the average Hierarchical Condition Category (HCC) risk score of beneficiaries treated. Social risk is measured by the proportion of patients treated who are dually eligible for Medicare and Medicaid. However, such bonus features may not be adequate to account for social-risk caseloads.<sup>8</sup> MIPS clinicians are subject to higher reductions in payment rates (9 percent in 2020-2023) and an increase in minimum performance thresholds (75 points in 2022-2023) to avoid payment reductions.<sup>20-24</sup> Previous research suggests that rural Medicare beneficiaries have lower average HCC risk scores than urban beneficiaries and small physician practices that are more likely to be located in rural have low average HCC scores as well.<sup>25</sup> Rural clinicians and those serving a higher percentage of minority beneficiaries could have their payments reduced for serving disadvantaged populations and locations. Furthermore, new scoring provisions could make it difficult for clinicians to receive higher scores. Since 2022, MIPS participants no longer receive bonus points for reporting measures that were previously eligible for additional bonus points (e.g., high-priority quality measures and bonus score performance measures). However, MIPS clinicians continue to receive improvement scores and small practice bonuses. Additionally, since the cost category is 30 percent of the total MIPS score in 2022-2023, performing well in MIPS will be challenging for clinicians serving a relatively higher percentage of the high-cost population.<sup>20,24</sup> In addition to scoring provisions, MIPS is now making changes to payment adjustment policies by removing the 10 percent additional payment adjustment for clinicians with exceptional performance.<sup>24</sup> The maximum payment adjustment rate was 0.20 percent in 2017 and 2018 without an exceptional performance adjustment was 1.88 percent in 2017 and 1.68 percent in 2018 with an exceptional performance adjustment.<sup>12,26</sup>

The MIPS program has been criticized for its smaller incentives relative to the efforts required for participation.<sup>27,28</sup> Policymakers should ensure that potential MIPS payments are significant enough to incentivize clinicians to perform well. They also need to ensure that changes to the system do not lead to disparities in MIPS performance and payment adjustments for nonmetropolitan and metropolitan clinicians. Finally, policymakers should consider appropriate strategies to make MIPS attractive to clinicians with different patient case mixes and those practicing in nonmetropolitan areas.

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**Table 1: Performance Score and Payment Adjustments, overall and by Metropolitan Status, 2018**

	<b>Overall</b>	<b>Nonmetropolitan</b>	<b>Metropolitan</b>	<b>P-value</b>
<b>MIPS Score (Out of 100)</b>				
Final	87.0	86.9	87.0	0.121
Cost	75.3	76.5	75.2	<0.001
Quality	82.6	82.6	82.6	0.545
IA (Out of 40)	38.2	38.0	38.2	<0.001
PI	90.8	89.6	90.9	<0.001
<b>Payment Adjustment (%)</b>				
Exceptional	84.2%	83.8%	84.3%	<0.001
Positive	13.3%	13.7%	13.2%	<0.001
Neutral	0.5%	0.5%	0.5%	0.923
Negative	2.0%	2.0%	2.0%	0.756
<b>N(%)</b>	887,081	102,866(11.6%)	784,215(88.4%)	
<b>Risk Adjusted MSPB (\$)</b>				
Total	200.4	182.1	202.7	<0.001
Medical	177.8	167.4	179.2	<0.001
Drug	534.9	342.1	563.4	<0.001
<b>N(%)</b>	780,886	89,793(11.5%)	691,093(88.5%)	

Note: We compare the differences between metropolitan and nonmetropolitan clinicians using one-way ANOVA for continuous variables and Chi square tests for categorical variables. There were no meaningful differences between nonmetropolitan and metropolitan clinicians in overall MIPS performance, but a slightly lower proportion of nonmetropolitan clinicians received exceptional performance payment adjustment. In addition, risk adjusted MSPB was lower for nonmetropolitan clinicians compared to metropolitan clinicians. MIPS = Merit-based Incentive Payment System; nonmetro = nonmetropolitan; metro = metropolitan; PI = Promoting Interoperability; IA = Improvement Activities; MSPB = Medicare Spending Per Beneficiary.



**Table 2: Performance Scores and Payment Adjustments by Practice Size, 2018**

<b>Practice Size</b>	<b>&gt;15</b>	<b>11-15</b>	<b>6-10</b>	<b>2-5</b>	<b>1</b>	<b>P-value</b>
<b>MIPS Score (Out of 100)</b>						
Final	90.3	84.5	86.1	85.9	55.4	<0.001
Cost	76.0	73.1	74.2	74.5	67.0	<0.001
Quality	85.9	77.5	79.4	80.1	52.0	<0.001
IA (Out of 40)	39.5	38.5	38.7	38.6	24.1	<0.001
PI	95.5	83.7	83.8	80.7	51.8	<0.001
<b>Payment Adjustment (%)</b>						
Exceptional	88.1%	79.1%	82.0%	82.4%	47.8%	<0.001
Positive	11.7%	20.8%	17.8%	17.3%	23.9%	<0.001
Neutral	0.0%	0.1%	0.1%	0.1%	5.2%	<0.001
Negative	0.1%	0.1%	0.1%	0.2%	23.1%	<0.001
<b>N (%)</b>	731,539(82.4%)	23,796(2.7%)	30,824(3.5%)	30,105(3.4%)	72,081(8.1%)	
<b>Risk Adjusted MSPB (\$)</b>						
Total	177.7	209.1	249.9	285.7	348.2	<0.001
Medical	159.8	183.5	212.7	244.3	300.7	<0.001
Drug	462.3	715.9	838.6	831	604.2	<0.001
<b>N (%)</b>	634,387(81.3%)	21,426(2.8%)	27,650(3.5%)	26,878(3.4%)	70,112(9.0%)	

Note: We compare the differences between practice sizes using one-way ANOVA for continuous variables and Chi square tests for categorical variables. Clinicians in large group practices had a considerably higher average final overall score compared to solo practices and about 23.1% of solo clinicians had their payments reduced due to MIPS performance. MIPS = Merit-based Incentive Payment System; nonmetro = nonmetropolitan; metro = metropolitan; PI = Promoting Interoperability; IA = Improvement Activities; MSPB = Medicare Spending Per Beneficiary

**Table 3: Performance Scores and Payment Adjustments by Practice Size and Metropolitan Status, 2018**

Practice Size	>15			11-15			6-10			2-5			1		
	Nonmetro	Metro	P-value	Nonmetro	Metro	P-value	Nonmetro	Metro	P-value	Nonmetro	Metro	P-value	Nonmetro	Metro	P-value
<b>MIPS Score (Out of 100)</b>															
Final	90.3	90.3	0.805	83.8	84.7	0.029	85.8	86.2	0.247	86.1	85.9	0.776	56.6	55.2	0.003
Cost	77.6	75.9	<0.001	76.8	72.7	<0.001	71.8	74.4	<0.001	74.2	74.5	0.666	69	66.6	<0.001
Quality	86	85.9	<0.001	77.4	77.6	0.667	79.5	79.5	0.997	80.1	80.2	0.869	53.1	51.8	0.010
IA (Out of 40)	39.4	39.5	<0.001	37.9	38.7	<0.001	38.8	38.7	0.642	38.7	38.5	0.161	24	24.1	0.571
PI	94.6	95.6	<0.001	81.7	84.0	0.001	83.3	83.9	0.316	80.4	80.8	0.591	50.5	52.0	0.015
<b>Payment Adjustment (%)</b>															
Exceptional	87.9%	88.2%	0.037*	77.7%	79.4%	0.021	81.2%	82.2%	0.143	81.6%	82.6%	0.122	48.7%	47.7%	0.074
Positive	11.8%	11.7%	0.218	22.3%	20.4%	0.010	18.7%	17.7%	0.116	18.2%	17.1%	0.076	24.2%	23.8%	0.392
Neutral	0.0%	0.0%	0.997	0.0%	0.1%	0.127	0.0%	0.1%	0.088	0.0%	0.1%	0.336	5.1%	5.2%	0.705
Negative	0.2%	0.1%	<0.001	0.0%	0.1%	0.023	0.1%	0.1%	0.914	0.1%	0.2%	0.221	21.9%	23.3%	0.005
N (%)	82,498 (11.3%)	646,828 (88.7%)	<0.001	3,597 (15.2%)	20,134 (84.8%)		3,895 (12.7%)	26,831 (87.3%)		4,193 (14.0%)	25,833 (86.0%)		8,557 (11.9%)	63,468 (88.1%)	
<b>Risk Adjusted MSPB (\$)</b>															
Total	164.0	179.4	<0.001	176.2	215	<0.001	202.2	257.0	<0.001	223.4	296.3	<0.001	307.1	353.9	<0.001
Medical	151.4	160.8	<0.001	167.6	186.4	<0.001	181.6	217.5	<0.001	202.5	251.8	<0.001	273.5	304.6	<0.001
Drug	309.1	484.2	<0.001	256.6	805.1	<0.001	357.0	918.8	<0.001	526.7	886.2	<0.001	415.3	632.3	<0.001
N (%)	70,678 (11.2%)	563,096 (88.9%)		3,210 (15.0%)	18,187 (85%)		3,506 (12.7%)	24,106 (87.3%)		3,849 (14.3%)	23,001 (85.7%)		8,435 (12.0%)	61,623 (88.0%)	

Note: We compare the differences between metropolitan and nonmetropolitan clinicians using one-way ANOVA for continuous variables and Chi square tests for categorical variables. Nonmetropolitan clinicians in solo practices had higher average cost and quality scores but a lower average PI score than their metropolitan counterparts. MIPS = Merit-based Incentive Payment System; nonmetro = nonmetropolitan; metro = metropolitan; PI = Promoting Interoperability; IA = Improvement Activities; MSPB = Medicare Spending Per Beneficiary.

**Table 4: Performance of MIPS Clinicians by Percentage of Minority Beneficiaries and Metropolitan Status, 2018**

% Minority Beneficiaries	Low				Mid				High			
	Overall	Nonmetro	Metro	P-value	Overall	Nonmetro	Metro	P-value	Overall	Nonmetro	Metro	P-value
<b>MIPS Score (Out of 100)</b>												
Final	85.9	85.5	86.0	0.011	85.7	83.5	85.9	<0.001	84.3	82.8	84.4	<0.001
Cost	77.4	77.5	77.4	0.556	75.3	77.2	75.2	<0.001	75.0	76.7	74.9	<0.001
Quality	81.9	81.2	82.0	<0.001	81.2	78.5	81.4	<0.001	79.2	78.0	79.3	<0.001
IA (Out of 40)	37.3	37.2	37.3	0.014	37.9	37.5	37.9	<0.001	37.6	37.2	37.6	<0.001
PI	87.9	87.3	88.0	0.001	90.2	86.7	90.4	<0.001	87.9	86.2	88.0	<0.001
<b>Payment Adjustment (%)</b>												
Exceptional	82.7%	82.3%	82.8%	0.065	82.6%	79.0%	82.8%	<0.001	81.0%	78.2%	81.1%	<0.001
Positive	13.6%	14.2%	13.4%	0.001	14.6%	17.4%	14.4%	<0.001	15.5%	18.0%	15.3%	<0.001
Neutral	0.4%	0.3%	0.4%	0.001	0.5%	0.9%	0.5%	<0.001	1.0%	1.6%	1.0%	<0.001
Negative	3.4%	3.3%	3.4%	0.269	2.3%	2.7%	2.3%	<0.001	2.6%	2.2%	2.6%	0.029
<b>N (%)</b>	127,710	28,207 (22.1%)	99,398 (77.9%)		383,133	25,403 (6.6%)	357,491 (93.4%)		127,697	6,730 (5.3%)	120,796 (94.7%)	
<b>Risk-Adjusted MSPB (\$)</b>												
Total	216.4	196.0	222.2	<0.001	208.1	190.6	209.4	<0.001	199.9	172.5	201.5	<0.001
Medical	190.1	177.5	193.8	<0.001	183.8	173.6	184.5	<0.001	176.7	158.2	177.7	<0.001
Drug	608.1	459.8	647.9	<0.001	594.9	319.7	618.0	<0.001	384.5	213.0	394.2	<0.001
<b>N (%)</b>	125,848	27,937 (22.2%)	97,808 (77.8%)		375,881	25,191 (6.7%)	350,451 (93.3%)		123,811	6,635 (5.4%)	117,005 (94.6%)	

Note: We compare the differences between metropolitan and nonmetropolitan clinicians using one-way ANOVA for continuous variables and Chi square tests for categorical variables. Nonmetropolitan clinicians serving the highest percentage of minority beneficiaries received lower total scores and were less likely to receive an exceptional performance payments adjustment compared to metropolitan clinicians serving the highest percentage of minority beneficiaries. MIPS = Merit-based Incentive Payment System; nonmetro = nonmetropolitan; metro = metropolitan; PI = Promoting Interoperability; IA = Improvement Activities; MSPB = Medicare Spending Per Beneficiary.

**Table 5: Reported Measures by Performance Categories – Overall and by Metropolitan Status, 2018**

<b>Quality</b>					
<b>Overall</b>	<b>%</b>	<b>Nonmetropolitan</b>	<b>%</b>	<b>Metropolitan</b>	<b>%</b>
Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	13.8	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	14.4	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	13.7
Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan	8.9	Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan	8.1	Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan	9.0
Documentation of Current Medications in the Medical Record	8.3	Documentation of Current Medications in the Medical Record	8.0	Documentation of Current Medications in the Medical Record	8.4
Use of High-Risk Medications in the Elderly	7.3	Use of High-Risk Medications in the Elderly	6.4	Use of High-Risk Medications in the Elderly	7.5
Pneumococcal Vaccination Status for Older Adults	5.3	Colorectal Cancer Screening	6.0	Pneumococcal Vaccination Status for Older Adults	5.4
Colorectal Cancer Screening	4.9	Diabetes: Eye Exam	5.0	Colorectal Cancer Screening	4.7
Care Plan	4.5	Pneumococcal Vaccination Status for Older Adults	5.0	Care Plan	4.6
Diabetes: Eye Exam	3.3	Breast Cancer Screening	4.4	Diabetes: Eye Exam	3.1
Breast Cancer Screening	2.9	Care Plan	4.1	Preventive Care and Screening: Influenza Immunization	2.8
Preventive Care and Screening: Influenza Immunization	2.9	Preventive Care and Screening: Influenza Immunization	3.4	Breast Cancer Screening	2.7
<b>Promoting Interoperability</b>					
<b>Overall</b>	<b>%</b>	<b>Nonmetropolitan</b>	<b>%</b>	<b>Metropolitan</b>	<b>%</b>
National Coordinator for Health Information Technology (ONC) Direct Review Attestation	10.2	National Coordinator for Health Information Technology (ONC) Direct Review Attestation	9.9	National Coordinator for Health Information Technology (ONC) Direct Review Attestation	10.2
Security Risk Analysis	10.1	Security Risk Analysis	9.8	Security Risk Analysis	10.1
Provide Patient Access	9.8	Provide Patient Access	9.6	Provide Patient Access	9.9
e-Prescribing	9.2	e-Prescribing	9.1	e-Prescribing	9.2
Patient-Specific Education	9.1	Patient-Specific Education	9.0	Patient-Specific Education	9.2
Secure Messaging	8.1	Secure Messaging	8.0	Secure Messaging	8.1

Medication Reconciliation	7.4	Medication Reconciliation	7.1	Medication Reconciliation	7.4
ONC-Authorized Certification Bodies (ONC-ACBs) Surveillance Attestation (Optional)	6.0	ONC-Authorized Certification Bodies (ONC-ACBs) Surveillance Attestation (Optional)	6.5	ONC-Authorized Certification Bodies (ONC-ACBs) Surveillance Attestation (Optional)	6.0
Specialized Registry Reporting	4.5	Health Information Exchange	5.0	PI bonus for submission of eligible Improvement Activities using CEHRT	4.6
PI bonus for submission of eligible Improvement Activities using CEHRT	4.4	View, Download, or Transmit (VDT)	4.7	Specialized Registry Reporting	4.5
<b>Improvement Activities</b>					
<b>Overall</b>	<b>%</b>	<b>Nonmetropolitan</b>	<b>%</b>	<b>Metropolitan</b>	<b>%</b>
Measurement and Improvement at the Practice and Panel Level	9.0	Measurement and Improvement at the Practice and Panel Level	11.2	Measurement and Improvement at the Practice and Panel Level	8.7
Implementation of medication management practice improvements	8.8	Implementation of medication management practice improvements	10.7	Implementation of medication management practice improvements	8.5
Use of decision support and standardized treatment protocols	7.7	Use of decision support and standardized treatment protocols	10.2	Provide 24/7 Access to MIPS Eligible Clinicians or Groups Who Have Real-Time Access to Patient's Medical Record	7.5
Provide 24/7 Access to MIPS Eligible Clinicians or Groups Who Have Real-Time Access to Patient's Medical Record	7.2	Chronic Care and Preventative Care Management for Empaneled Patients	9.0	Use of decision support and standardized treatment protocols	7.4
Chronic Care and Preventative Care Management for Empaneled Patients	6.3	Provide 24/7 Access to MIPS Eligible Clinicians or Groups Who Have Real-Time Access to Patient's Medical Record	5.4	Chronic Care and Preventative Care Management for Empaneled Patients	5.9
Participation in an AHRQ-listed patient safety organization.	5.0	Participation in an AHRQ-listed patient safety organization.	3.4	Participation in an AHRQ-listed patient safety organization.	5.2
Implementation of formal quality improvement methods, practice changes, or other practice improvement processes	4.0	Engagement of New Medicaid Patients and Follow-up	3.3	Implementation of formal quality improvement methods, practice changes, or other practice improvement processes	4.2
Engagement of New Medicaid Patients and Follow-up	2.8	Implementation of formal quality improvement methods, practice changes, or other practice	2.9	Implementation of Use of Specialist Reports Back to Referring Clinician or Group to Close Referral Loop	2.8

		improvement processes			
Implementation of Use of Specialist Reports Back to Referring Clinician or Group to Close Referral Loop	2.8	Annual registration in the Prescription Drug Monitoring Program	2.5	Implementation of improvements that contribute to more timely communication of test results	2.8
Implementation of improvements that contribute to more timely communication of test results	2.7	Implementation of Use of Specialist Reports Back to Referring Clinician or Group to Close Referral Loop	2.4	Engagement of New Medicaid Patients and Follow-up	2.7

Note: Metropolitan and nonmetropolitan clinicians were likely to report similar measures across different MIPS categories.

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