DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop # C5-15-12
Baltimore, Maryland 21244-1850

2016 Value-Based Payment Modifier Program Experience Report

April 2017

Centers for Medicare & Medicaid Services

This page has been left blank for double-sided copying.

CONTENTS

TABLES

FIGURE

This page has been left blank for double-sided copying.

I. INTRODUCTION AND KEY FINDINGS

This Experience Report summarizes data on the physician groups subject to the Value-Based Payment Modifier (Value Modifier) in 2016. It provides information on the characteristics of these groups in terms of their size and specialty mix; describes their performance on the quality and cost measures used to calculate the Value Modifier; and shows the number and types of groups that are receiving upward, neutral, or downward payment adjustments in 2016.[1]

Starting on January 1, 2015, the Centers for Medicare & Medicaid Services (CMS) began the phase in of applying the Value Modifier to physician payments under the Medicare Physician Fee Schedule (PFS). The Value Modifier is designed to reward higher quality care delivered at lower cost, as required by Section 3007 of the Patient Protection and Affordable Care Act. Section 3007 of that act requires CMS to apply the Value Modifier to specific physicians and groups of physicians as determined by the Secretary of the U.S. Department of Health and Human Services beginning no later than January 1, 2015, and to all physicians and groups of physicians paid under the Medicare PFS beginning no later than January 1, 2017.

In 2016, the Value Modifier applies to physician payments under the Medicare PFS for physicians in groups—as identified by their Medicare-enrolled Taxpayer Identification Number (TIN)—with 10 or more eligible professionals (EPs). EPs consist of physicians, practitioners[2], physical or occupational therapists, qualified speech-language pathologists, and qualified audiologists. TINs were not subject to the 2016 Value Modifier if (1) no physician submitted a Medicare claim in 2014 under the TIN, or (2) one or more physicians in the TIN participated in a Medicare Shared Savings Program Accountable Care Organization (ACO), the Pioneer ACO Model, or the Comprehensive Primary Care (CPC) initiative during 2014.

Calendar year 2014 is the performance period for the Value Modifier that is being applied in 2016. TINs with 10 or more EPs that are subject to the Value Modifier in 2016 were identified using a two-step process. First, CMS generated a list of TINs that had 10 or more EPs in the Provider Enrollment, Chain, and Ownership System (PECOS) as of October 16, 2014. Second, CMS removed TINs from this list if they did not have 10 or more EPs (and at least one of whom was a physician) who submitted a Medicare claim under the TIN at any time during 2014.

To avoid an automatic downward adjustment under the 2016 Value Modifier, EPs in TINs with 10 or more EPs were required to participate in the Physician Quality Reporting System (PQRS) in 2014 and either avoid the 2016 PQRS payment adjustment as a group or have at least

---

[1] The data in this report are current as of March 2016. CMS established an Informal Review Period during which a TIN is able to request a correction of a perceived error in the determination of its 2016 Value Modifier. This report reflects all adjustments made due to Value Modifier Informal Reviews. However, based on PQRS Informal Reviews resolved after the analysis in this report was completed, the Value Modifier for 53 TINs changed favorably.

[2] Practitioners include physician assistants (PAs), nurse practitioners (NPs), and clinical nurse specialists (CNSs). For a list of providers designated as eligible professionals by CMS based on their two-digit CMS specialty codes, see the Detailed Methodology for the 2016 Value Modifier and the 2014 Quality and Resource Use Report, available at: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2014QRUR-2016VM-DetailedMethodology.pdf.

50 percent of the EPs in the group avoid the 2016 PQRS payment adjustment as individuals.[3] TINs subject to the 2016 Value Modifier that avoided the 2016 PQRS payment adjustment, as a group or as individuals, are classified as Category 1 TINs. Category 1 TINs had their Value Modifier calculated using the quality-tiering methodology, whereby the 2016 Medicare PFS payments for physicians billing under these TINs could be adjusted upward or downward or remain unchanged depending on their performance on quality and cost measures in 2014. The number of EPs in the TIN in 2014 impacted the direction and magnitude of the adjustments that were possible for a TIN.[4] Category 1 TINs with 10 to 99 EPs were not subject to downward payment adjustments under the quality-tiering methodology.

TINs subject to the 2016 Value Modifier that did not meet the criteria for Category 1 are classified as Category 2 TINs. Physicians billing under these TINs receive an automatic negative two percent (–2.0%) Value Modifier downward payment adjustment to their 2016 Medicare PFS payments for claims with dates of service in 2016. The 2016 Value Modifier is applied separately from, and in addition to, any PQRS payment adjustment and payment adjustments from other Medicare-sponsored programs or initiatives that can be applied to the TIN or to individual EPs within the TIN.

A. Key findings

1. Based on these criteria, 13,813 TINs are subject to the Value Modifier in 2016. Of these, 8,437 TINs (61.1 percent) are classified as Category 1. 5,376 TINs (38.9 percent) are classified as Category 2 either because they did not avoid the 2016 PQRS payment adjustment as a group or did not have at least 50 percent of the EPs in the TIN avoid the 2016 PQRS payment adjustment as individuals. The physicians billing under Category 2 TINs are receiving a negative two percent (–2.0%) adjustment to their 2016 Medicare PFS payments, under the 2016 Value Modifier.
2. Among Category 1 TINs, physicians billing under 128 TINs (1.5 percent) are receiving an upward adjustment to their 2016 Medicare PFS payments; physicians billing under 8,252 TINs are receiving no payment adjustment (97.8 percent); and physicians billing under 57 TINs (0.7 percent) are receiving a downward adjustment to their 2016 Medicare PFS payments for claims with dates of service in 2016. Category 1 TINs with 10 to 99 EPs were not subject to downward payment adjustments under the quality-tiering methodology.
3. The primary driver behind poor performance was quality. Of the 57 TINs receiving downward payment adjustments in 2016 under the quality-tiering methodology, 37 were in the low-quality tier. The roles of quality and cost performance were more evenly balanced among the 128 TINs receiving upward adjustments, where 73 TINs were in the

[3] Additional information on avoiding the 2016 PQRS payment adjustment is available at https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Downloads/2014PQRS__Avoiding2016PQRS-PaymentAdjustment_F03-27-2014.pdf.

[4] Beginning with the 2016 Value Modifier, quality-tiering is mandatory for all TINs subject to the Value Modifier.

low-cost tier and 55 TINs were in the high-quality tier. For the 56 TINs classified as high quality, none had low cost; for the 7,693 TINs with average quality, 73 had low cost.

4. Of the 128 TINs with high performance under the quality-tiering methodology, 58 serve relatively clinically complex beneficiaries and are receiving an additional upward payment adjustment of +1.0 times the adjustment factor. Among TINs with average CMS Hierarchical Condition Category (CMS-HCC)[5] scores in the highest quartile, 1.5 percent are receiving upward payment adjustments and 1.1 percent are receiving downward payment adjustments. Among TINs with average CMS-HCC scores in the lowest quartile, 1.5 percent are receiving upward and none are receiving downward payment adjustments.
5. TINs receiving an upward payment adjustment have, on average, fewer hospital admissions for Acute and Chronic Ambulatory Care-Sensitive Conditions (ACSCs), fewer unplanned hospital readmissions within 30 days, lower Medicare Spending Per Beneficiary (MSPB), and lower per capita costs than TINs receiving a downward payment adjustment under quality-tiering.
6. There was no consistent relationship between quality tier and performance on the six individual cost measures or between cost tier and performance in the six quality domains.
7. Of the 13,813 TINs subject to the Value Modifier, 2,125 (15.3 percent) registered to report PQRS data via one of the three group reporting mechanisms—Group Practice Reporting Option (GPRO) Web Interface, qualified registry, or electronic health record (EHR)—and the remaining 11,688 TINs could be classified as Category 1 based on reporting as individuals—either via claims, a qualified registry, EHR, or Qualified Clinical Data Registry (QCDR). The vast majority (85.7 percent) of TINs that registered to report as a group are classified as Category 1 compared with over half (56.6 percent) of TINs whose EPs reported as individuals.
8. Larger TINs (100 or more EPs) that elected a GPRO are more likely to be considered Category 1 than smaller TINs (92.5 percent for larger TINs and 83.3 percent for smaller TINs). Conversely, smaller TINs whose EPs reported as individuals are slightly more likely to be Category 1 (56.7 percent) than larger TINs whose EPs reported as individuals (54.8 percent).
9. TINs composed of 50 percent or more primary care physicians are slightly more likely to receive an upward payment adjustment (2.2 percent) than TINs with fewer than 50 percent primary care physicians (1.4 percent).
10. The ten specialties[6] with the largest share of physicians in TINs with an upward adjustment are allergy/immunology, nephrology, emergency medicine, ophthalmology, optometry, gastroenterology, neurology, orthopedic surgery, anesthesiology, and obstetrics/gynecology. Approximately 2 percent of physicians subject to the Value

[5] CMS-HCC scores measure Medicare beneficiaries' relative clinical complexity or estimated health care spending based on their diagnosis information from the prior year.

[6] Specialty analyses in this report focus on specialties with at least 1,000 physicians in that specialty who billed under a TIN subject to the 2016 Value Modifier.

Modifier in these specialties are receiving an upward adjustment. The percentage of TINs with these specialists receiving an upward adjustment varies from 3.1 percent for allergist/immunologists to 21.1 percent for emergency medicine physicians.

11. The ten specialties with the largest share of physicians billing under Category 1 TINs receiving a downward adjustment due to performance are medical oncology, internal medicine, critical care, plastic and reconstructive surgery, geriatric medicine, radiation oncology, neurosurgery, thoracic surgery, hematology/oncology, and rheumatology, ranging from 2.7 to 7.3 percent of physicians in those specialties. Note that since there were only 57 TINs receiving a downward payment adjustment due to performance, these percentages account for a small number of physicians.
12. The ten specialties with the largest share of physicians in TINs with a downward adjustment due to Category 2 status are psychiatry, optometry, general practice, podiatry, pediatric medicine, family practice, physical medicine and rehabilitation, internal medicine, obstetrics/gynecology, and general surgery. At least 30 percent of physicians in each of these specialties who are in TINs subject to the Value Modifier are receiving a downward adjustment.

II. BACKGROUND

A. How the Value Modifier is determined

CMS classified TINs as Category 1 or Category 2 based on their participation in the PQRS during the 2014 performance period. TINs are classified as Category 1 if they avoided the 2016 PQRS payment adjustment by reporting in one of three reporting mechanisms under the 2014 PQRS GPRO—(1) Web Interface (for TINs with 25 or more EPs), (2) qualified PQRS registry, or (3) EHR. Alternatively, TINs are classified as Category 1 if at least 50 percent of the EPs in the TIN avoided the 2016 PQRS payment adjustment as individuals—via claims, a qualified registry, EHR, or QCDR. TINs with 10 or more EPs that did not avoid the 2016 PQRS payment adjustment as a group or as individuals are considered Category 2 and are automatically receiving a negative two percent (–2.0%) Value Modifier downward payment adjustment for all of the TIN's physicians' Medicare PFS payments in 2016.

Category 1 TINs had their Value Modifier payment adjustments calculated using a quality-tiering approach in which CMS calculated composite scores for quality and cost to assign TINs to low, average, or high quality and cost tiers. To be considered either a high or a low performer for quality or cost, a TIN's composite score must be at least one standard deviation above or below the mean composite score for the peer group and be statistically significantly different from the mean composite score for the peer group. Under the 2016 Value Modifier, based on these requirements, the composite score cutoffs in percentile terms are as follows:

- For the Quality Composite Score, a TIN had to score above the 97th percentile to be considered high quality and below the 10th percentile to be considered low quality.
- For the Cost Composite Score, a TIN had to score above the 92nd percentile to be considered high cost and below the 13th percentile to be considered low cost.

If the TIN's Quality or Cost Composite Score is within one standard deviation of the mean composite score for the peer group or if it is greater than one standard deviation from the mean but is not statistically significantly different, then the TIN's performance is designated as average.

Because the Value Modifier must be budget neutral, CMS uses an adjustment factor (AF) to distribute downward payment adjustments to the higher-performing TINs—those that are at least average on both quality and cost, and better than average on at least one. In 2016, Category 1 TINs with 10 to 99 EPs were not subject to downward payment adjustments under the quality-tiering methodology (Tables II.1 and II.2).

Table II.1. 2016 quality-tiering categories and adjustments for TINs with 100 or more EPs

	Low quality	Average quality	High quality
Low cost	0.0%	15.92%[a] (+1.0 x AF)	31.84%[a] (+2.0 x AF)
Average cost	–1.0%	0.0%	15.92%[a] (+1.0 x AF)
High cost	–2.0%	–1.0%	0.0%

Note: The AF for the 2016 Value Modifier is approximately 15.92 percent.

[a] TINs with high quality and cost performance that avoided the 2016 PQRS payment adjustment and whose attributed beneficiaries' average CMS-HCC scores were at or above the 75th percentile of beneficiaries nationwide are eligible for an additional adjustment of 15.92 percent, or +1.0 x AF.

Table II.2. 2016 quality-tiering categories and adjustment for TINs with 10 to 99 EPs

	Low quality	Average quality	High quality
Low cost	0.0%	15.92%[a] (+1.0 x AF)	31.84%[a] (+2.0 x AF)
Average cost	0.0%	0.0%	15.92%[a] (+1.0 x AF)
High cost	0.0%	0.0%	0.0%

Note: The AF for the 2016 Value Modifier is approximately 15.92 percent.

[a] TINs with high quality and cost performance that avoided the 2016 PQRS payment adjustment and whose attributed beneficiaries' average CMS-HCC scores were at or above the 75th percentile of beneficiaries nationwide are eligible for an additional adjustment of 15.92 percent, or +1.0 x AF.

The amount of the AF varies from year to year, based on the projected billings of the higher-performing TINs compared with those of TINs receiving a downward payment adjustment. The AF is approximately 15.92 percent for the 2016 Value Modifier, meaning that Medicare PFS payments to a TIN categorized as high quality and average cost, or, as average quality and low cost are adjusted upward by approximately 15.92 percent in 2016.

The Quality and Cost Composites are each composed of multiple domains and the measures within each of the domains are equally weighted. The Quality Composite Score is composed of scores from up to six domains that align with the National Quality Strategy: (1) Effective Clinical Care, (2) Person and Caregiver-Centered Experience and Outcomes, (3) Community/Population Health, (4) Patient Safety, (5) Communication and Care Coordination, and (6) Efficiency and Cost Reduction.

In calculating the Quality Composite Score for the 2016 Value Modifier, CMS includes (1) PQRS measures reported by the TIN or by individual EPs within the TIN and (2) three claims-based quality outcome measures calculated from Medicare Fee-for-Service (FFS) claims submitted for Medicare beneficiaries attributed to the TIN. Quality measures must have 20 eligible cases to be included in the calculation of the Quality Composite.

Beginning in 2014, CMS began permitting TINs of 25 or more EPs to report Consumer Assessment of Healthcare Providers and Systems (CAHPS for PQRS) survey measures in conjunction with other quality measures. While CAHPS reporting was mandatory for certain TINs depending on size and reporting mechanism, inclusion of CAHPS in a TIN's 2016 Value Modifier calculation was optional. Reporting CAHPS for PQRS was required for TINs with at least 100 EPs that reported measures via the GPRO Web Interface; TINs with 25 or more EPs could opt to include CAHPS for PQRS in their calculations of the 2016 Value Modifier. If a TIN elected to include CAHPS for PQRS in the calculation of its 2016 Value Modifier, every measure with at least 20 eligible cases was included in the Person- and Caregiver-Centered Experience and Outcomes Domain.[7]

The Cost Composite Score is composed of costs from up to two cost domains: Per Capita Costs for All Attributed Beneficiaries and Per Capita Costs for Beneficiaries with Specific Conditions (diabetes, chronic obstructive pulmonary disease [COPD], coronary artery disease [CAD], and heart failure).[8] Beginning with the 2016 Value Modifier, CMS included the MSPB measure in the Per Capita Costs for All Attributed Beneficiaries domain.

To be included in 2016 Value Modifier calculations, a TIN must have had at least 20 eligible cases for a cost or quality measure. A domain score was not computed for any domain for which the TIN did not have at least one measure with at least 20 cases. If a TIN's Quality or Cost Composite Score could not be calculated because the TIN did not have at least one measure with at least 20 eligible cases, then the TIN's cost or quality performance was designated as average for the 2016 Value Modifier.

---

[7] The Health Status/Functional Status measure, a descriptive measure of beneficiary characteristics, is reported for informational purposes only. This CAHPS for PQRS measure is not used in the calculation of the 2016 Value Modifier.

[8] The overall and four condition-specific per capita cost measures reflect allowed charges for all Medicare Parts A and B claims submitted by all providers (regardless of their TIN affiliation) that treated Medicare FFS beneficiaries attributed to each TIN.

B. Quality and Resource Use Reports

Under the Value-Based Payment Modifier Program, CMS disseminates confidential reports, called Quality Resource Use Reports (QRURs), to groups and solo practitioners. CMS followed a phased approach to implementing physician feedback reporting as a way to expand understanding of policy issues related to measuring physician-driven quality and cost. In 2015, 177,617 TINs received a 2014 Annual QRUR based on 2014 performance.

Each recipient's 2014 Annual QRUR provides detailed information on the EPs that billed under the TIN, the beneficiaries for whom those EPs provided a plurality of primary care services[9], the MSPB episodes for which those EPs provided a plurality of Part B–covered services, and the measures summarizing performance on the quality and cost of care received by attributed beneficiaries during the performance year. In addition, each Annual QRUR includes benchmarks that indicate how well the TIN performed on these measures relative to its peers. The Annual QRURs also include information on the hospitals treating these beneficiaries and lists the primary diagnoses and discharge status for most of their hospital stays. From this information, CMS computed and displayed the Quality and Cost Composite Scores and Value Modifier, if applicable.

III. CHARACTERISTICS OF TINS SUBJECT TO THE 2016 VALUE MODIFIER

This section describes some of the characteristics of the EPs and attributed beneficiaries of 13,813 TINs subject to the 2016 Value Modifier based on their 2014 quality and cost performance under quality-tiering.[10] To provide context, we also describe the characteristics of the 177,627 TINs that received a 2014 Annual QRUR.[11] Table III.1 summarizes the findings.

Not all of the 177,627 TINs that received a 2014 Annual QRUR are subject to the 2016 Value Modifier. The 2016 Value Modifier does not apply to TINs with fewer than 10 EPs or to TINs with at least one physician that participate in a Medicare Shared Savings Program ACO, the Pioneer ACO Model, or the CPC initiative.

The number of TINs subject to the Value Modifier increased from 1,010 in 2015 to 13,813 in 2016. This increase was due to the expansion of the application of the Value Modifier to the

---

[9] Primary care services include evaluation and management services provided in office and other non-inpatient and non-emergency room settings, as well as initial Medicare visits and annual wellness visits. For a list of these codes, refer to the Detailed Methodology for the 2014 QRURs and 2016 Value Modifier, available at https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2014QRUR-2016VM-DetailedMethodology.pdf.

[10] A total of 1,792 additional TINs would have been subject to the Value Modifier had they not had one or more physicians who participated in a Medicare Shared Savings Program ACO, the Pioneer ACO Model, or the CPC initiative during 2014.

[11] CMS produced 2014 Annual QRURs for groups and solo practitioners with at least one eligible case for at least one quality or cost measure, including groups and solo practitioners consisting only of non-physician EPs.

12,847 TINs with 10 to 99 EPs this year. The number of TINs with 100 or more EPs subject to the Value Modifier decreased slightly from 2015, from 1,010 to 966.

A. TIN characteristics: EPs

TINs subject to the 2016 Value Modifier had an average of 46.7 EPs (Table III.1). They represent varying specialty mixes. Over half of TINs subject to the Value Modifier (57.8 percent) are predominantly single specialty TINs, meaning that at least half of the EPs in these TINs have the same specialty. Larger TINs subject to the Value Modifier are much less likely to be predominantly single specialty (23.6 percent) relative to TINs with 10 to 99 EPs (60.4 percent).

TINs that received 2014 Annual QRURs were, on average, smaller than those subject to the Value Modifier, with an average of 6.4 EPs. Nearly 60 percent of TINs receiving a 2014 Annual QRUR were solo practitioners.

Table III.1. Characteristics of TINs receiving 2014 Annual QRURs and TINs subject to the 2016 Value Modifier

	All TINs subject to 2016 Value Modifier	TINs with 100 or more EPs subject to 2016 Value Modifier	TINs with 10 to 99 EPs subject to 2016 Value Modifier	TINs receiving 2014 Annual QRURs
Number of TINs	13,813	966	12,847	177,627
TIN characteristics: EPs				
Average number of EPs	46.7	309.9	26.9	6.4
Percentage of TINs that are solo practices	0.0%	0.0%	0.0%	59.9%
Predominantly single specialty: Percentage of TINs with more than 50 percent of EPs with same specialty	57.8%	23.6%	60.4%	86.6%
Predominantly primary care physician (PCP): Percentage of TINs with more than 50 percent of EPs who are PCPs	11.3%	7.5%	11.6%	26.1%
Average percentage of EPs who are physicians	70.9%	70.9%	70.9%	87.6%
Average percentage of EPs who are PCPs	17.1%	22.6%	16.7%	28.2%
Average percentage of EPs who are non-physicians	29.1%	29.1%	29.1%	12.4%
Average percentage of EPs who are NPs, PAs, or CNSs	15.5%	16.4%	15.4%	5.7%
TIN characteristics: Attributed beneficiaries[a]				
Average number of attributed beneficiaries	635.7	4,637.5	320.2	134.5
Average percentage of beneficiaries attributed on the basis of primary care services provided by PCPs (Step 1)	45.5%	70.8%	42.9%	38.0%
Average number of primary care services provided by the TIN per attributed beneficiary	7.7	8.7	7.6	7.4
Average percentage of primary care service visits provided by the TIN to its attributed beneficiaries	65.5%	66.4%	65.4%	65.0%
Average TIN-level CMS-HCC score	1.40	1.38	1.40	1.16

[a] The term *attributed beneficiaries* represents beneficiaries attributed to TINs based on the two-step attribution method discussed in the next section; a different attribution method is used for the PQRS and MSPB measures.

B. TIN characteristics: Beneficiaries attributed to TINs based on two-step attribution

Beneficiaries who received at least one primary care service from a physician in 2014 were attributed to TINs in two steps, for the purpose of computing the per capita cost and claims-based quality outcome measures. In Step 1, a beneficiary was attributed to a TIN whose primary care physicians provided more primary care services to that beneficiary (as measured by Medicare-allowed charges) than did primary care physicians in any other TIN. Beneficiaries who did not receive primary care services from any primary care physician were assigned in Step 2 to the TIN whose physician specialists, NPs, PAs, and CNSs accounted for more Medicare-allowed charges for primary care services than any other TIN. This two-step attribution was implemented for the following claims-based measures included in the 2014 Annual QRUR and 2016 Value Modifier: hospital admissions for Acute and Chronic ACSC Composite measures, 30-day All-Cause Hospital Readmission, Per Capita Costs for All Attributed Beneficiaries, and four measures of Per Capita Costs for Beneficiaries with Specific Conditions.[12] Throughout this analysis, the term *attributed beneficiaries* represents the beneficiaries attributed to TINs based on the two-step attribution method.

Among TINs subject to the 2016 Value Modifier, 45.5 percent of attributed beneficiaries were attributed to TINs in Step 1 of the attribution process, on the basis of receiving the plurality of their primary care services from primary care physicians in a TIN. The remaining 54.5 percent of attributed beneficiaries were attributed in Step 2 on the basis of receiving the plurality of primary care services from non-primary care physicians, NPs, PAs, or CNSs in the TIN. Large TINs—those with 100 or more EPs—had on average the highest percentage of beneficiaries attributed in Step 1 (70.8 percent). For comparison, among all TINs receiving a 2014 Annual QRUR, 38.0 percent of attributed beneficiaries were attributed in Step 1. Eligible professionals billing under TINs subject to the 2016 Value Modifier provided on average 7.7 primary care services per attributed beneficiary. This ranged from an average of 8.7 services per attributed beneficiary in large TINs to 7.6 in TINs with 10 to 99 eligible professionals.

On average, TINs subject to the 2016 Value Modifier were attributed beneficiaries under the two-step attribution process who are relatively clinically complex compared to all Medicare FFS beneficiaries nationwide, as indicated by the CMS-HCC score. Specifically, the average CMS-HCC score for beneficiaries attributed to TINs subject to the Value Modifier was 1.40.[13]

---

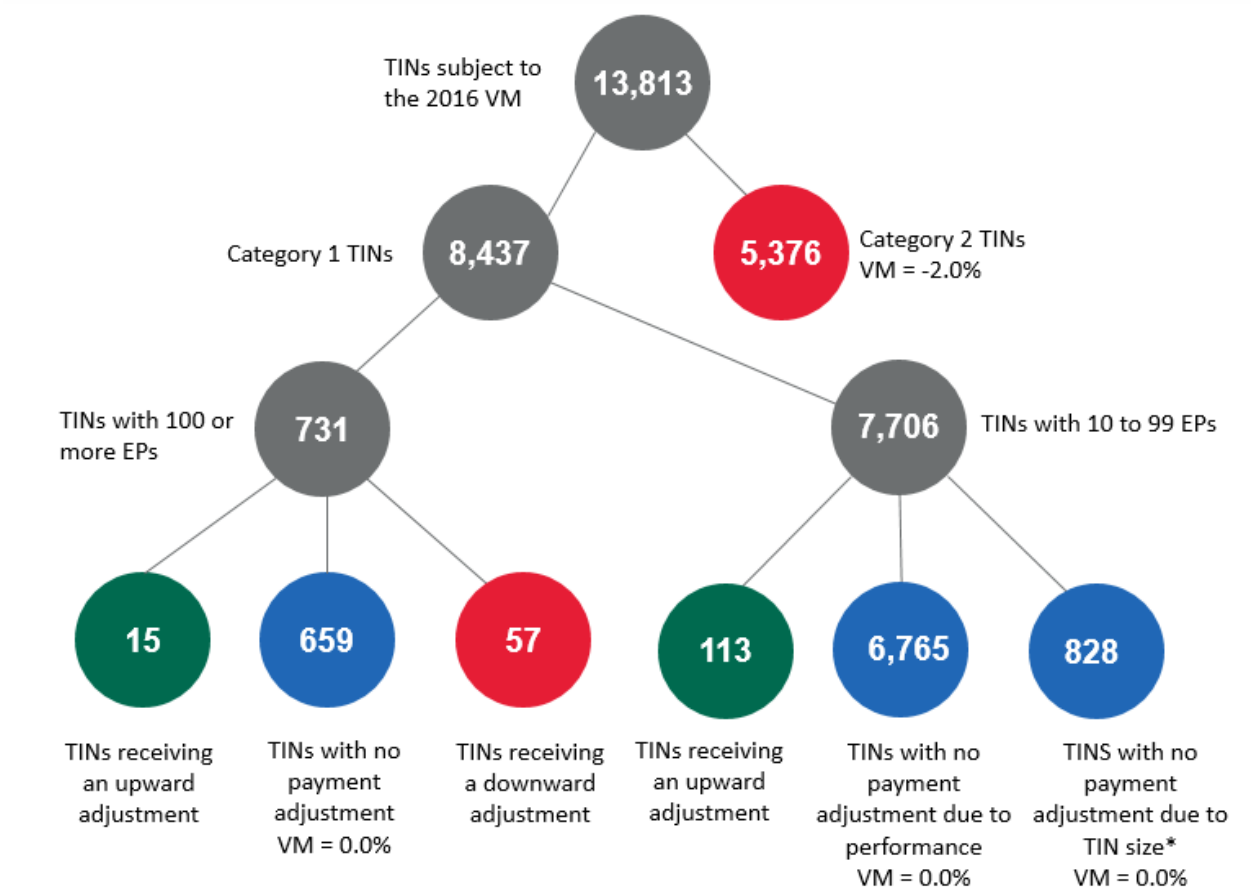
[12] The PQRS quality measures, CAHPS for PQRS measures, and MSPB measures included in the Value Modifier use a different attribution methodology.

[13] At the TIN level, the average CMS-HCC score is calculated based on all beneficiaries attributed to the TIN for the per capita cost and MSPB measures. An average CMS-HCC score of 1.0 corresponds to expected expenditures equal to the average beneficiary expenditure nationwide; higher CMS-HCC scores are associated with higher expected expenditures.

IV. THE 2016 VALUE MODIFIER: QUALITY-TIERING AND PERFORMANCE

Figure IV.1 illustrates the number of TINs subject to the 2016 Value Modifier; the points at which a Value Modifier was calculated; and how many TINs are receiving an upward, neutral, or downward payment adjustment.

Figure IV.1. TINs subject to the 2016 Value Modifier



* These are TINs with 10 to 99 EPs that had poor performance but received a neutral Value Modifier payment adjustment because TINs of this size were not subject to a downward Value Modifier payment adjustment in 2016.

As illustrated in Figure IV.1, 13,813 TINs are subject to the 2016 Value Modifier. Of these, 8,437 (61.1 percent) are classified as Category 1 because they either avoided the 2016 PQRS payment adjustment as a group or had at least 50 percent of the EPs in the TIN avoid the 2016 PQRS payment adjustment as individuals. The remaining 5,376 TINs are classified as Category 2 and are receiving an automatic negative two percent (-2.0%) Value Modifier downward payment adjustment. A higher proportion of TINs with 10 to 99 EPs are classified as Category 2 (40.0 percent) than TINs with 100 or more EPs (24.3 percent).

Of the 8,437 Category 1 TINs, 128 (1.5 percent) are receiving an upward adjustment and 57 (0.7 percent) are receiving a downward adjustment. Most Category 1 TINs (8,252, or 97.8 percent) are receiving no payment adjustment in 2016. Of these, 7,424 TINs (659 with 100 or more EPs and 6,765 with 10 to 99 EPs) are receiving no payment adjustment because they

exhibited average performance on quality and cost measures or had insufficient data to calculate both a Cost and Quality Composite Score.[14] Another 828 TINs (9.8 percent) are receiving no payment adjustment because they had fewer than 100 EPs and Category 1 TINs of this size are not subject to downward payment adjustments under the Value Modifier in 2016.

A. Quality-tiering results for the 2016 Value Modifier

Table IV.1 presents the distribution of the TINs across quality and cost tiers. Quality-tiering is required for all TINs subject to the 2016 Value Modifier. Most TINs are classified as average for both quality and cost. Quality tiers varied more than cost tiers; 91.2 percent of TINs fell into the average quality tier, but 96.2 percent of TINs fell into the average cost tier.

Under quality-tiering, a TIN's performance is designated as average for quality or cost if:

1) The TIN's composite score is within one standard deviation of the mean for the peer group, or
2) The TIN did not have sufficient data to calculate a composite score.

Although quality-tiering classifies most Category 1 TINs as average quality and average cost, the number of poorly performing TINs (low quality and average cost, average quality and high cost, or low quality and high cost), at 885[15], is notably more than the 128 TINs with high performance (high quality and average cost, average quality and low cost, or high quality and low cost). Overall, there are 12 times more low quality TINs than high quality TINs (688 to 56), and three times more high cost TINs than low cost TINs (242 to 80).

The lower frequency of high performers occurs because distributions of the Quality Composite Score and Cost Composite Score are skewed. On the quality side, TINs and their EPs tend to report PQRS measures on which they expect to do well. This leads to high benchmark performance rates and consequently makes it difficult for a TIN to distinguish itself from its peers as a high performer.[16] Conversely, it may be easier for a TIN to distinguish itself from its peers as a high performer on measures with low benchmark performance rates. On the cost side, there is no upper limit on costs, and many TINs have very high costs.

---

[14] A TIN does not have sufficient data to compute a composite score if during the performance period of 2014: (1) it did not have at least one measure with at least 20 eligible cases; or (2) the TIN's composite score is at least one standard deviation away from the peer group mean composite score, but the difference is not statistically significantly different from the composite mean. TINs with insufficient data for a composite are classified as average for the composite.

[15] Of the 885 poorly performing TINs, 57 are receiving a downward payment adjustment. Another 828 poorly performing TINs are receiving no payment adjustment because they had fewer than 100 EPs and Category 1 TINs of this size are not subject to downward payment adjustments under the Value Modifier in 2016.

[16] For example, if the only quality measures included in a TIN's Quality Composite Score are three PQRS measures that each have a benchmark of 90 percent, the TIN might not be able to earn a high quality designation even with perfect scores of 100 percent on all three measures if the standard deviations for each of these measures are sufficiently large.

Of the 7,693 TINs in the average quality tier, 692 (9.3 percent) were average quality because they had insufficient data to calculate a Quality Composite Score. Of the 8,115 TINs in the average cost tier, 2,696 (33.2 percent) were average cost because they had insufficient data to calculate a Cost Composite Score.

The vast majority of Category 1 TINs have both average quality and cost (87.9 percent, Table IV.1). An additional 7.6 percent have low quality with average cost and 2.4 percent have average quality with high cost. The other six quality and cost tier combinations each contain less than one percent of Category 1 TINs.

The primary driver behind poor performance was quality. Among the 885 TINs with poor performance, 681 were in the low-quality tier; whereas, only 241 were in the high-cost tier. Thirty-seven TINs had both low quality and high cost. On the other hand, the roles of quality and cost performance were more evenly balanced among the 128 high performing TINs, where 73 TINs were in the low-cost tier and 55 TINs were in the high–quality tier. Furthermore, of the 56 TINs classified as high quality, none had low cost; of 7,693 TINs with average quality, 73 had low cost.

Table IV.1. Distribution of all Category 1 TINs, by quality and cost tiers (N = 8,437 TINs)

	Low quality	Average quality	High quality	Total
Low cost	0.1% (7)	0.9% (73)	0.0% (0)	1.0% (80)
Average cost	7.6% (644)	87.9% (7,416)	0.7% (55)	96.2% (8,115)
High cost	0.4% (37)	2.4% (204)	0.0% (1)	2.9% (242)
Total	8.2% (688)	91.2% (7,693)	0.7% (56)	100.0% (8,437)

Notes: This table displays the quality and cost categories of 8,437 Category 1 TINs (of the 13,813 TINs subject to the 2016 Value Modifier). It excludes Category 2 TINs for which the Value Modifier was not based on performance under quality-tiering. Percentages might not sum to 100 percent due to rounding. Values in parentheses represent the number of TINs.

692 TINs are classified as average quality because these TINs had insufficient data to calculate a Quality Composite Score, and 2,696 TINs are classified as average cost because these TINs had insufficient data to calculate a Cost Composite Score.

Although TINs of 100 or more EPs are slightly less likely to be classified as low quality (5.1 percent) than those with 10 to 99 EPs (8.5 percent), the distribution of TINs across cost tiers is similar regardless of TIN size (Tables IV.2 and IV.3).

Table IV.2. Distribution of Category 1 TINs with 100 or more EPs, by quality and cost tiers (N = 731 TINs)

	Low quality	Average quality	High quality	Total
Low cost	0.0% (0)	1.6% (12)	0.0% (0)	1.6% (12)
Average cost	4.8% (35)	90.2% (659)	0.4% (3)	95.4% (697)
High cost	0.3% (2)	2.7% (20)	0.0% (0)	3.0% (22)
Total	5.1% (37)	94.5% (691)	0.4% (3)	100.0% (731)

Notes: This table displays the quality and cost categories of 731 Category 1 TINs with 100 or more EPs (of the 966 TINs with 100 or more EPs that were subject to the 2016 Value Modifier). It excludes Category 2 TINs for which the Value Modifier was not based on performance under quality-tiering. Percentages might not sum to 100 percent due to rounding. Values in parentheses represent the number of TINs.

Five TINs with 100 or more EPs are classified as average quality because these TINs had insufficient data to calculate a Quality Composite Score, and 25 TINs with 100 or more EPs are classified as average cost because these TINs had insufficient data to calculate a Cost Composite Score.

Table IV.3. Distribution of Category 1 TINs with 10 to 99 EPs, by quality and cost tiers (N = 7,706 TINs)

	Low quality	Average quality	High quality	Total
Low cost	0.1% (7)	0.8% (61)	0.0% (0)	0.9% (68)
Average cost	7.9% (609)	87.7% (6,757)	0.7% (52)	96.3% (7,418)
High cost	0.5% (35)	2.4% (184)	0.0% (1)	2.9% (220)
Total	8.5% (651)	90.9% (7,002)	0.7% (53)	100.0% (7,706)

Notes: This table displays the quality and cost categories of 7,706 Category 1 TINS with 10 to 99 EPs (of the 12,847 TINs with 10 to 99 EPs that were subject to the 2016 Value Modifier). It excludes Category 2 TINs for which the Value Modifier was not based on performance under quality-tiering. Percentages might not sum to 100.0 percent due to rounding. Values in parentheses represent the number of TINs.

Among TINs with 10 to 99 EPs, 687 are classified as average quality because these TINs had insufficient data to calculate a Quality Composite Score, and 2,671 TINs are classified as average cost because these TINs had insufficient data to calculate a Cost Composite Score.

B. Performance under the 2016 Value Modifier

In the following sections, we examine characteristics of Category 1 TINs to identify similarities or differences in performance on the Quality and Cost Composites by payment adjustment category. We first consider the characteristics of the 8,437 TINs in Category 1. Second, we examine relationships between TIN characteristics and performance on the Quality and Cost Composites among these TINs.

1. TIN characteristics by payment adjustment category

Among Category 1 TINs, those receiving an upward payment adjustment are more likely to be smaller—in terms of the average number of physicians, non-physician EPs, and attributed beneficiaries—than TINs receiving a downward payment adjustment (Table IV.4). This is partly because Category 1 TINs with 10 to 99 EPs are subject only to upward or neutral payment adjustments and are not subject to downward payment adjustments under quality-tiering for the 2016 Value Modifier.

Moreover, Category 1 TINs receiving a downward payment adjustment treat more clinically complex beneficiaries, on average, as indicated by their CMS-HCC scores (1.76) compared with TINs receiving an upward payment adjustment (1.36). TINs receiving a downward payment adjustment on average also have a lower percentage of beneficiaries with diabetes, COPD, CAD, and heart failure than TINs receiving a neutral or downward payment adjustment. On average, TINs subject to the 2016 Value Modifier were attributed beneficiaries who are relatively clinically complex compared to all Medicare FFS beneficiaries nationwide, as indicated by the CMS-HCC score. Specifically, the average CMS-HCC score for beneficiaries attributed to TINs subject to the Value Modifier was 1.40.

TINs receiving an upward payment adjustment have a lower average percentage of beneficiaries attributed on the basis of primary care services provided by PCPs in Step 1 of Attribution (23.1 percent) compared with TINs receiving a neutral payment adjustment (46.6 percent) or a downward payment adjustment (66.5 percent).

Table IV.4. Characteristics of Category 1 TINs, by payment adjustment category (N = 8,437 TINs)

	Upward payment adjustment	Neutral payment adjustment	Downward payment adjustment (100 or more EP TINs only)[a]
Number (percentage) of TINs	128 (1.5%)	8,252 (97.8%)	57 (0.7%)
Average number of physicians	33.4	38.4	176.6
Average number of non-physician EPs	13.4	14.3	76.9
Average number of attributed beneficiaries[b]	656.5	857.9	1,493.4
Average percentage of beneficiaries attributed on the basis of primary care services provided by PCPs (Step 1)	23.1%	46.6%	66.5%
Average number of primary care services provided by the TIN per attributed beneficiary	5.7	7.5	12.1
Average percentage of primary care service visits provided by the TIN to its attributed beneficiaries	65.3%	64.0%	62.8%
Average percentage of attributed beneficiaries with specific conditions[b]			
Diabetes	19.4%	22.9%	32.7%
COPD	4.9%	9.8%	15.2%
CAD	22.1%	26.2%	33.4%
Heart failure	6.9%	12.2%	21.8%
Average of TIN-level CMS-HCC scores	1.36	1.46	1.76

[a] The downward payment adjustment category includes only Category 1 TINs with 100 or more EPs because Category 1 TINs with 10 to 99 EPs were subject only to neutral or upward payment adjustments under the 2016 Value Modifier.

[b] The term *attributed beneficiaries* represents the beneficiaries attributed to TINs based on the two-step attribution method for the per capita cost and claims-based quality outcome measures; a different attribution method is used for the PQRS and MSPB measures.

Stratifying by clinical complexity, 1.5 percent of TINs in the highest quartile for average CMS-HCC score are receiving an upward payment adjustment and 1.1 percent are receiving a downward payment adjustment. For context, 1.5 percent of all Category 1 TINs subject to the 2016 Value Modifier are receiving an upward payment adjustment and 0.7 percent are receiving a downward payment adjustment. Among TINs in the highest quartile for average CMS-HCC score, 15.4 percent would have received a downward payment adjustment if they had been subject to such adjustments in 2016. Among TINs in the lowest quartile for average CMS-HCC score, 1.5 percent are receiving an upward payment adjustment and none are receiving a downward payment adjustment. Nearly nine percent of TINs in the lowest quartile for average CMS-HCC score would have received a downward payment adjustment if they had been subject to such adjustments in 2016 (Table IV.5).

Table IV.5. Distribution of Category 1 TINs across payment adjustment categories, by average beneficiary CMS-HCC score (N = 8,437 TINs)

	Average CMS-HCC score			
	Lowest quartile (0.20–0.73 CMS-HCC score)	Second quartile (0.73–1.02 CMS-HCC score)	Third quartile (1.03–1.40 CMS-HCC score)	Highest quartile (1.40–9.66 CMS-HCC score)
Percentage (number) of TINs receiving upward payment adjustment, TINs with 10 or more EPs	1.5% (21)	1.9% (22)	1.3% (31)	1.5% (54)
Percentage (number) of TINs receiving neutral payment adjustment, TINs with 10 or more EPs	90.0% (1,273)	94.5% (1,102)	92.8% (2,143)	82.0% (2,906)
Percentage (number) of TINs receiving downward payment adjustment, TINs with 100 or more EPs	0.0% (0)	0.3% (4)	0.6% (13)	1.1% (40)
Percentage (number) of TINs not subject to downward payment adjustment due to size, TINs with 10 to 99 EPs	8.6% (121)	3.3% (38)	5.3% (123)	15.4% (546)
Total	100.0% (1,415)	100.0% (1,166)	100.0% (2,310)	100.0% (3,456)

Notes: The CMS-HCC score quartiles are based on the distribution of TIN-level average CMS-HCC scores for all TINs subject to the VM. However, the TIN counts shown in this table include only Category 1 TINs. Thus, we do not expect the number of TINs appearing in each quartile to be the same.

The 8,437 Category 1 TINs were assigned to these quartiles based on the average CMS-HCC score for beneficiaries attributed under the two-step attribution method.

Under the 2016 Value Modifier, TINs with high performance that serve relatively clinically complex beneficiaries are eligible for an additional upward payment adjustment of +1.0 times the AF. TINs with an average beneficiary CMS-HCC score at or above the 75th percentile of all Medicare beneficiaries nationwide are eligible for this high-risk bonus adjustment. Among TINs with an upward payment adjustment, those receiving the high-risk bonus adjustment had, on average, slightly more physicians and non-physicians, markedly fewer attributed beneficiaries, higher average percentages of beneficiaries with chronic conditions, and a much higher average CMS-HCC score than TINs not receiving the high-risk bonus adjustment (Table IV.6).

Table IV.6. Characteristics of Category 1 TINs with upward payment adjustment, by high-risk bonus adjustment status (N = 128 TINs)

	Upward payment adjustment and no high-risk bonus adjustment	Upward payment adjustment and high-risk bonus adjustment
Number (percentage) of TINs receiving an upward payment adjustment	70 (54.7%)	58 (45.3%)
Average number of physicians	27.3	40.7
Average number of non-physician EPs	11.3	15.9
Average number of attributed beneficiaries[a]	1,166.7	40.8
Average percentage of attributed beneficiaries with specific conditions[a]		
Diabetes	16.0%	26.1%
COPD	3.1%	8.5%
CAD	16.9%	32.3%
Heart failure	5.0%	10.6%
Average of TIN-level CMS-HCC scores	0.91	1.91

[a] The term *attributed beneficiaries* represents the beneficiaries attributed to TINs based on the two-step attribution method for per capita and claims-based quality outcome measures; a different attribution method is used for the PQRS and MSPB measures.

Among the 731 Category 1 TINs with 100 or more EPs, TINs with more attributed beneficiaries are more likely to receive a neutral payment adjustment relative to those with fewer attributed beneficiaries. Stratifying by the number of attributed beneficiaries, 98.4 percent of TINs in the highest quartile are receiving a neutral payment adjustment; only 1.1 percent of these TINs are receiving an upward adjustment and 0.6 percent are receiving a downward adjustment (Table IV.7). In contrast, 7.1 percent of TINs in the lowest quartile of attributed beneficiaries are receiving an upward payment adjustment and 14.2 percent are receiving a downward adjustment.

Table IV.7. Distribution of Category 1 TINs with 100 or more EPs across payment adjustment categories, by TIN size (N = 731 TINs)

	TIN size based on number of attributed beneficiaries			
	Lowest quartile (TINs with 0 to 241 beneficiaries)	Second quartile (TINs with 242 to 3,397 beneficiaries)	Third quartile (TINs with 3,398 to 7,389 beneficiaries)	Highest quartile (TINs with 7,390 to 50,405 beneficiaries)
Percentage (number) of TINs receiving upward payment adjustment	7.1% (13)	0.0% (0)	0.6% (1)	0.6% (1)
Percentage (number) of TINs receiving neutral payment adjustment	78.7% (144)	88.0% (161)	95.6% (175)	98.4% (179)
Percentage (number) of TINs receiving downward payment adjustment	14.2% (26)	12.0% (22)	3.8% (7)	1.1% (2)
Total	100.0% (183)	100.0% (183)	100.0% (183)	100.0% (182)

Notes: The 731 TINs were organized into four quartiles, based on the number of beneficiaries attributed to each TIN under the two-step attribution method for the per capita cost and claims-based quality outcome measures.

The lowest quartile includes Category 1 TINs that have 0 attributed beneficiaries meaning these TINs did not have any beneficiaries attributed under two-step attribution for the per capita cost and claims-based quality outcome measures. They would have received a Quality Composite Score based on PQRS measures and, if elected, the CAHPS for PQRS measures, if they had sufficient case numbers for any of these measures. Their Cost Composite Score was based on the MSPB measure, if they had sufficient case numbers.

Among TINs with 10 to 99 EPs, the vast majority (98.5 percent) are receiving a neutral payment adjustment regardless of the number of attributed beneficiaries (Table IV.8). TINs with one or more attributed beneficiaries are more likely to receive an upward payment adjustment than those with no attributed beneficiaries (2.2 percent[17] compared with 0.6 percent). TINs with 10 to 99 EPs are subject only to upward or neutral payment adjustments under the 2016 Value Modifier.

[17] This is the weighted average of the percentage of TINs with 10 to 99 EPs receiving upward payment adjustments in the second, third, and highest quartiles of the number of attributed beneficiaries.

Table IV.8. Distribution of Category 1 TINs with 10 to 99 EPs across payment adjustment categories, by TIN size (N = 7,706 TINs)

	TIN size based on number of attributed beneficiaries			
	Lowest quartile (TINs with 0 beneficiaries)	Second quartile (TINs with 1 to 5 beneficiaries)	Third quartile (TINs with 6 to 162 beneficiaries)	Highest quartile (TINs with 163 to 17,180 beneficiaries)
Percentage (number) of TINs receiving upward payment adjustment	0.6% (22)	1.4% (6)	3.0% (55)	1.6% (30)
Percentage (number) of TINs receiving neutral payment adjustment	99.4% (3,565)	98.6% (420)	97.0% (1,776)	98.4% (1,832)
Percentage (number) of TINs receiving downward payment adjustment	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Total	100.0% (3,587)	100.0% (426)	100.0% (1,831)	100.0% (1,862)

Notes: The 7,706 TINs were organized into four quartiles based on the number of beneficiaries attributed to each TIN under the two-step attribution method. The lowest quartile includes Category 1 TINs that have 0 attributed beneficiaries for the per capita cost and claims-based quality outcome measures. These 3,587 TINs account for 47% of the 7,706 Category 1 TINs with 10 to 99 EPs. To offset this, the second quartile represents less than 25 percent of TINs.

TINs that have 0 attributed beneficiaries would have received a Quality Composite Score based on PQRS measures and, if elected, the CAHPS for PQRS measures, if they had sufficient case numbers for any of these measures. Their Cost Composite Score was based on the MSPB measure, if they had sufficient case numbers.

Among the 128 Category 1 TINs receiving an upward payment adjustment, those with no beneficiaries attributed under the two-step attribution method are the most likely to receive the high-risk bonus adjustment (85.7 percent). While these TINs did not have any beneficiaries attributed under two-step attribution for the hospital admissions for Acute and Chronic ACSC Composite, 30-day All-Cause Hospital Readmission, and per capita cost measures, they would have received a Quality Composite Score based on PQRS measures and, if elected, the CAHPS for PQRS measures, if they had sufficient case numbers. Their Cost Composite Score was based on the MSPB measure, if they had sufficient case numbers. In contrast, only 8.7 percent of TINs in the highest quartile of attributed beneficiaries are receiving the high-risk bonus adjustment. (Table IV.9).

Table IV.9. Distribution of upward payment adjustment TINs by high-risk bonus adjustment status, by TIN size (N = 128 TINs)

	TIN size based on number of attributed beneficiaries			
	Lowest quartile (TINs with 0 beneficiaries)	Second quartile (TINs with 1 to 11 beneficiaries)	Third quartile (TINs with 12 to 259 beneficiaries)	Highest quartile (TINs with 260 to 50,405 beneficiaries)
Percentage (number) of TINs not receiving high-risk bonus adjustment	14.3% (4)	16.7% (2)	66.2% (43)	91.3% (21)
Percentage (number) of TINs receiving high-risk bonus adjustment	85.7% (24)	83.3% (10)	33.9% (22)	8.7% (2)
Total	100.0% (28)	100.0% (12)	100.0% (65)	100.0% (23)

Notes: The four quartiles are based on the number of attributed beneficiaries across all 8,437 Category 1 TINs based on the two-step attribution method for the per capita cost and claims-based quality outcome measures.

The lowest quartile includes Category 1 TINs that have 0 attributed beneficiaries meaning these TINs did not have any beneficiaries attributed under two-step attribution for the per capita cost and claims-based quality outcome measures. They would have received a Quality Composite Score based on PQRS measures and, if elected, the CAHPS for PQRS measures, if they had sufficient case numbers for any of these measures. Their Cost Composite Score was based on the MSPB measure, if they had sufficient case numbers.

2. Claims-based measure performance

There was no discernable pattern of performance when comparing the claims-based quality outcome measures or cost measures of Category 1 and Category 2 TINs. While Category 1 TINs performed better on hospital admissions for Acute ACSC Composite measures, Category 2 TINs performed better on hospital admissions for Chronic ACSC Composite measures on average (Table IV.10). Although Category 1 and 2 TINs had nearly identical total per capita costs ($10,922 versus $10,926), Category 2 TINs had higher per capita costs for all four chronic conditions—diabetes, COPD, coronary artery disease, and heart failure.

As expected, TINs receiving an upward payment adjustment are more likely to have higher quality and/or lower costs compared with TINs receiving a neutral or downward payment adjustment. In particular, TINs receiving an upward payment adjustment have fewer hospital admissions on average for acute and chronic ACSCs and fewer unplanned hospital readmissions compared with those receiving a downward payment adjustment (Table IV.11). These TINs also have lower average per capita costs for all attributed beneficiaries, at $7,182 compared with $16,089 for TINs receiving a downward adjustment. Average per capita costs for each of the four chronic condition groups and the MSPB measure follow a similar trend.

The average percentage of attributed beneficiaries with emergency services not included in a hospital admission—a statistic reported in the 2014 Annual QRUR but not included in the 2016 Value Modifier—was also lower for TINs receiving an upward payment adjustment compared with those receiving a downward payment adjustment (25.0 versus 48.2 percent, respectively).

Table IV.10 Select performance measures for Category 1 and Category 2 TINs (N = 13,813 TINs)

	Category 1 TINs	Category 2 TINs
Number of TINs	8,437	5,376
Average Acute ACSC Composite rate[a]	7.9	8.3
Average Chronic ACSC Composite rate[a]	58.7	51.8
Average 30-day All-Cause Hospital Readmission rate[b]	15.3	15.5
Average per capita costs		
All attributed beneficiaries	$10,922	$10,926
Diabetes	$ 16,023	$16,754
COPD	$ 25,569	$27,507
CAD	$ 17,567	$19,282
Heart failure	$25,614	$27,067
Average MSPB	$19,414	$19,758
Average percentage of attributed beneficiaries who received emergency services that did not result in a hospital admission	34.4%	38.8%

Note: Higher scores indicate worse performance for all measures shown in this table.

[a] Hospital admissions per 1,000 beneficiaries.

[b] Per 100 index admissions.

Table IV.11. Select performance measures for Category 1 TINs, by payment adjustment category (N = 8,437 TINs)

	Upward payment adjustment	Neutral payment adjustment	Downward payment adjustment
Number of TINs	128	8,252	57
Select measures included in the 2016 Value Modifier			
Average Acute ACSC Composite rate[a]	2.7	7.9	14.9
Average Chronic ACSC Composite rate[a]	21.1	59.2	92.2
Average 30-day All-Cause Hospital Readmission rate[b]	15.0	15.3	16.5
Average per capita costs			
All attributed beneficiaries	$7,182	$10,953	$16,089
Diabetes	$10,316	$16,073	$23,407
COPD	$17,704	$25,591	$37,821
CAD	$10,610	$17,615	$27,839
Heart failure	$15,390	$25,685	$38,608
Average MSPB	$18,217	$19,431	$19,778
Other measures reported in 2014 Annual QRUR, but not included in the 2016 Value Modifier			
Average percentage of attributed beneficiaries who received emergency services that did not result in a hospital admission	25.0%	34.5%	48.2%

Note: Higher scores indicate worse performance for all measures shown in this table.

[a] Hospital admissions per 1,000 beneficiaries.

[b] Per 100 index admissions.

3. Composite-level performance

Tables IV.12, IV.13, and IV.14 show the average performance of quality-tiered TINs for the Quality and Cost Composites, quality and cost domains, and selected measures. Although the tables represent all Category 1 TINs, TINs that either did not report on or did not meet the minimum number of eligible cases for any given composite, domain, or measure are not included in the average performance reflected in the tables. Some averages are based on a small number of TINs and should be interpreted in that context.

For quality domains, a negative domain score indicates worse performance than a positive domain score. For cost domains, however, a negative domain score indicates better performance than a positive domain score.

TINs categorized as high quality scored consistently better across all six quality domains, on average, than TINs categorized as average or low quality (Table IV.12). High-quality TINs had the strongest performance in the Effective Clinical Care and the Community/Population Health Domains, scoring on average 1.5 standard deviations above the benchmark for each domain. Low-quality TINs had the weakest performance in the Efficiency and Cost Reduction Domain and the Effective Clinical Care Domain, scoring on average 9.4 and 3.6 standard deviations below the benchmark for each respective domain.

Cost Composite Scores were similar, on average, across all quality tiers, however, there was no consistent trend across the six cost measures. TINs categorized as high quality overall had lower average per capita costs for all attributed beneficiaries and for beneficiaries with specific chronic conditions than those categorized as low quality. MSPB, on the other hand, was relatively similar across quality tiers, varying by only 5.2 percent, from an average of $19,797 for high quality TINs to $18,758 for low quality TINs. This measure shows per-episode costs for Medicare Parts A and B expenditures surrounding specific inpatient hospital stays (3 days before admission through 30 days after discharge).

Table IV.12. Average performance of Category 1 TINs, by quality tier (N = 8,437 TINs)

Performance metric	All Category 1 TINs	Low-quality tier TINs	Average-quality tier TINs	High-quality tier TINs
Number of TINs with Quality and Cost Composite Scores	7,745	688	7,001	56
Quality Composite Score	**–0.2**	**–3.1**	**0.1**	**1.3**
Effective Clinical Care	–0.4	–3.6	–0.1	1.5
Person- and Caregiver-Centered Experience and Outcomes	–0.2	–3.4	0.0	-
Community/Population Health	0.3	–1.2	0.3	1.5
Patient Safety	–0.1	–2.2	0.0	0.6
Communication and Care Coordination	0.2	–1.6	0.2	1.2
Acute ACSC Composite rate[a,c]	7.9	22.7	7.3	2.0
Chronic ACSC Composite rate[a,c]	58.7	97.3	57.6	17.4
30-day All-Cause Hospital Readmission rate[b,c]	15.3	15.7	15.3	14.7
Efficiency and Cost Reduction	–0.5	–9.4	0.0	-
Cost Composite Score[c]	**–0.5**	**–0.6**	**–0.5**	**–0.6**
Average Per Capita Costs				
All attributed beneficiaries[c]	$11,458	$14,212	$11,373	$8,796
Diabetes[c]	$16,839	$20,973	$16,714	$12,919
COPD[c]	$26,265	$34,362	$26,000	$22,323
CAD[c]	$18,355	$23,552	$18,198	$14,152
Heart failure[c]	$26,613	$35,055	$26,353	$20,105
Average MSPB[c]	$19,414	$18,758	$19,471	$19,797

Notes: Of the 8,437 Category 1 TINs, 7,745 had both a Quality and Cost Composite Score.

The measure scores shown in this table are unstandardized performance scores. Domain scores are the equally weighted average of standardized measure scores in the domain. The composite scores are the equally weighted average of non-missing domain scores.

A hyphen (-) indicates that no TINs had at least 20 eligible cases for at least one measure in the domain.

[a] Hospital admissions per 1,000 beneficiaries.

[b] Per 100 index admissions.

[c] Higher scores indicate worse performance.

TINs with 100 or more EPs and those with 10 to 99 EPs exhibited similar results (Tables IV.13 and IV.14): average performance on quality domains tended to be higher and there was no consistent cost performance trend with each successive quality tier regardless of TIN size.

Furthermore, among low-quality TINs, those with 10 to 99 EPs tended to have higher costs across all per capita cost measures than TINs with 100 or more EPs. MSPB was relatively stable regardless of TIN size and quality tier.

Table IV.13. Average performance of Category 1 TINs with 100 or more EPs, by quality tier (N = 731 TINs)

Performance metric	All Category 1 TINs with 100 or more EPs	Low-quality tier TINs	Average-quality tier TINs	High-quality tier TINs
Number of TINs with Quality and Cost Composite Scores	726	37	686	3
Quality Composite Score	**–0.1**	**–2.7**	**0.0**	**1.3[d]**
Effective Clinical Care	–0.3	–4.3	0.0	1.3[d]
Person- and Caregiver-Centered Experience and Outcomes	–0.7	–3.7	–0.1	-
Community/Population Health	0.1	–1.2	0.1	2.1[d]
Patient Safety	–0.1	-1.3	0.0	0.6[d]
Communication and Care Coordination	0.0	-1.2	0.1	1.1[d]
Acute ACSC Composite rate[a,c]	6.8	8.9	6.8	2.4[d]
Chronic ACSC Composite rate[a,c]	58.0	87.7	56.9	23.8[d]
30-day All-Cause Hospital Readmission rate[b,c]	15.2	15.4	15.2	14.0[d]
Efficiency and Cost Reduction	–1.7	–41.5[d]	–0.4	-
Cost Composite Score[c]	**-0.3**	**-0.4**	**-0.3**	**-0.9[d]**
Average Per Capita Costs				
All attributed beneficiaries[c]	$11,071	$10,976	$11,089	$8,262[d]
Diabetes[c]	$16,270	$17,565	$16,241	$11,272[d]
COPD[c]	$25,159	$31,991	$24,898	$19,639[d]
CAD[c]	$18,561	$20,129	$18,519	$14,203[d]
Heart failure[c]	$27,347	$29,884	$27,261	$22,065[d]
Average MSPB[c]	$19,720	$19,375	$19,741	$19,036[d]

Notes: Of the 731 Category 1 TINs with 100 or more EPs, 726 had both a Quality and Cost Composite Score.

The measure scores shown in this table are unstandardized performance scores. Domain scores are the equally weighted average of standardized measure scores in the domain. The composite scores are the equally weighted average of non-missing domain scores.

A hyphen (-) indicates that no TINs had at least 20 eligible cases for at least one measure in the domain.

[a] Hospital admissions per 1,000 beneficiaries.

[b] Per 100 index admissions.

[c] Higher scores indicate worse performance.

[d] Score is based results from 5 or fewer TINs.

Table IV.14. Average performance of Category 1 TINs with 10 to 99 EPs, by quality tier (N = 7,706 TINs)

Performance metric	All Category 1 TINs with 10–99 EPs	Low-quality tier TINs	Average-quality tier TINs	High-quality tier TINs
Number of TINs with Quality and Cost Composite Scores	7,019	651	6,315	53
Quality Composite Score	**–0.2**	**–3.1**	**0.1**	**1.3**
Effective Clinical Care	–0.4	–3.5	–0.1	1.5
Person- and Caregiver-Centered Experience and Outcomes	–0.1	–3.2	0.0	-
Community/Population Health	0.3	–1.2	0.3	1.5
Patient Safety	–0.2	–2.3	0.0	0.6
Communication and Care Coordination	0.2	–1.7	0.3	1.2
Acute ACSC Composite rate[a,c]	8.1	25.0	7.4	1.9
Chronic ACSC Composite rate[a,c]	58.9	98.8	57.7	17.0
30-day All-Cause Hospital Readmission rate[b,c]	15.4	15.7	15.4	14.7
Efficiency and Cost Reduction	–0.4	–8.6	0.0	-
Cost Composite Score[c]	**-0.5**	**-0.6**	**-0.5**	**-0.6**
Average Per Capita Costs				
All attributed beneficiaries[c]	$11,517	$14,728	$11,417	$8,829
Diabetes[c]	$16,934	$21,545	$16,793	$13,022
COPD[c]	$26,469	$34,836	$26,205	$22,451
CAD[c]	$18,322	$24,126	$18,144	$14,149
Heart failure[c]	$26,483	$36,017	$26,191	$20,012
Average MSPB[c]	$19,378	$18,717	$19,438	$19,849

Notes: Of the 7,706 Category 1 TINs with 10 to 99 EPs, 7,019 had both a Quality and Cost Composite Score.

The measure scores shown in this table are unstandardized performance scores. Domain scores are the equally weighted average of standardized measure scores in the domain. The composite scores are the equally weighted average of non-missing domain scores.

A hyphen (-) indicates that no TINs had at least 20 eligible cases for at least one measure in the domain.

[a] Hospital admissions per 1,000 beneficiaries.

[b] Per 100 index admissions.

[c] Higher scores indicate worse performance.

Tables IV.15, IV.16, and IV.17 reflect the average performance of TINs with non-missing scores for the quality and cost measures shown. Some averages are based on a small number of TINs and should be interpreted in that context.

There was no consistent relationship between cost tier and performance in the six quality domain scores. TINs in lower cost tiers did not, on average, correspond with higher performance across all quality domains. For example, high cost TINs had better average performance on the Community/Population Health Domain but worse performance on the Communication and Care Coordination Domain compared with average- and low-cost tier TINs (Table IV.15). The greatest difference between low- and high-cost tier TINs was in hospital admissions for Acute

and Chronic ACSC Composite measures, in which high-cost tier TINs had 23.3 acute admissions per 1,000 beneficiaries and 88.0 chronic admissions per 1,000 beneficiaries with chronic conditions. On those measures, low-cost TINs had 3.5 and 27.3 admissions, respectively.

TINs classified as high cost performed worse on all six cost measures, on average, than TINs classified as low cost. Average per capita costs for high-cost TINs—as measured by the All Attributed Beneficiaries measure and the four measures for beneficiaries with specific conditions—were 3.3 to 4.2 times higher than their low-cost counterparts. In contrast, variation in average MSPB was dramatically lower, with the average MSPB for high-cost TINs 30 percent higher than for low-cost TINs.

Table IV.15. Average performance of Category 1 TINs, by cost tier (N = 8,437 TINs)

Performance metric	All Category 1 TINs	Low-cost tier TINs	Average-cost tier TINs	High-cost tier TINs
Number of TINs with Quality and Cost Composite Scores	7,745	78	7,426	241
Quality Composite Score	**-0.2**	**-0.1**	**-0.1**	**-0.6**
Effective Clinical Care	-0.4	-0.2	-0.4	-0.6
Person- and Caregiver-Centered Experience and Outcomes	-0.2	-1.3[d]	-0.2	0.1
Community/Population Health	0.3	0.2	0.2	0.5
Patient Safety	-0.1	-0.4	-0.1	-0.1
Communication and Care Coordination	0.2	0.7	0.2	-1.3
Acute ACSC Composite rate[a,c]	7.9	3.5	7.2	23.3
Chronic ACSC Composite rate[a,c]	58.7	27.3	57.5	88.0
30-day All-Cause Hospital Readmission rate[b,c]	15.3	15.4	15.3	16.6
Efficiency and Cost Reduction	-0.5	-7.1	-0.4	-0.7
Cost Composite Score[c]	**-0.5**	**-2.5**	**-0.6**	**3.3**
Average Per Capita Costs				
All attributed beneficiaries[c]	$11,458	$7,224	$10,877	$23,799
Diabetes[c]	$16,839	$9,335	$16,052	$32,852
COPD[c]	$26,265	$14,163	$25,090	$47,987
CAD[c]	$18,355	$8,699	$17,459	$36,762
Heart failure[c]	$26,613	$13,142	$25,388	$50,233
Average MSPB[c]	$19,414	$16,973	$19,373	$22,132

Notes: Of the 8,437 Category 1 TINs, 7,745 had both a Quality and Cost Composite Score.

Measure scores shown in this table are unstandardized performance scores. Domain scores are the equally weighted average of standardized measure scores in the domain. Composite scores are the equally weighted average of non-missing domain scores.

[a] Hospital admissions per 1,000 beneficiaries.

[b] Per 100 index admissions.

[c] Higher scores indicate worse performance.

[d] Score is based results from 5 or fewer TINs.

TINs with 100 or more EPs and those with 10 to 99 EPs generally followed similar performance trends (Tables IV.16 and IV.17); that is, there was no consistent relationship between cost tier and domain-level quality performance. Furthermore, low-cost TINs in both size categories performed better on average on all cost measures than their high-cost counterparts.

Table IV.16. Average performance of Category 1 TINs with 100 or more EPs, by cost tier (N = 731 TINs)

Performance metric	All Category 1 TINs with 100 or more EPs	Low-cost tier TINs	Average-cost tier TINs	High-cost tier TINs
Number of TINs with Quality and Cost Composite Scores	726	12	692	22
Quality Composite Score	**-0.1**	**0.0**	**-0.1**	**-0.5**
Effective Clinical Care	-0.3	0.2[d]	-0.3	-0.4
Person and Caregiver-Centered Experience and Outcomes	-0.7	-	-0.7	-
Community/Population Health	0.1	0.0[d]	0.1	0.8
Patient Safety	-0.1	-0.3	-0.1	0.0
Communication and Care Coordination	0.0	0.7[d]	0.1	-1.8
Acute ACSC Composite rate[a,c]	6.8	6.9	6.3	23.2
Chronic ACSC Composite rate[a,c]	58.0	7.8[d]	56.9	99.2
30-day All-Cause Hospital Readmission rate[b,c]	15.2	15.5[d]	15.1	18.0
Efficiency and Cost Reduction	-1.7	-	-1.7	-
Cost Composite Score[c]	**-0.3**	**-2.3**	**-0.4**	**2.9**
Average Per Capita Costs				
All attributed beneficiaries[c]	$11,071	$6,153	$10,693	$23,463
Diabetes[c]	$16,270	$8,099[d]	$15,774	$32,346
COPD[c]	$25,159	$13,052[d]	$24,452	$46,141
CAD[c]	$18,561	$10,253[d]	$17,931	$37,962
Heart failure[c]	$27,347	$40,651[d]	$26,493	$50,610
Average MSPB[c]	$19,720	$16,557	$19,751	$20,639

Notes: Of the 731 Category 1 TINs with 100 or more EPs, 726 had both a Quality and Cost Composite Score.

Measure scores shown in this table are unstandardized performance scores. Domain scores are the equally weighted average of standardized measure scores in the domain. Composite scores are the equally weighted average of non-missing domain scores.

A hyphen (-) indicates that no TINs had at least 20 eligible cases for at least one measure in the domain.

[a] Hospital admissions per 1,000 beneficiaries.

[b] Per 100 index admissions.

[c] Higher scores indicate worse performance.

[d] Score is based on results from 5 or fewer TINs.

Table IV.17. Average performance of Category 1 TINs with 10 to 99 EPs, by cost tier (N = 7,706 TINs)

Performance metric	All Category 1 TINs with 10 to 99 EPs	Low-cost tier TINs	Average-cost tier TINs	High-cost tier TINs
Number of TINs with Quality and Cost Composite Scores	7,019	66	6,734	219
Quality Composite Score	**-0.2**	**-0.2**	**-0.1**	**-0.7**
Effective Clinical Care	-0.4	-0.3	-0.4	-0.6
Person- and Caregiver-Centered Experience and Outcomes	-0.1	-1.3[d]	-0.1	0.1
Community/Population Health	0.3	0.2	0.3	0.5
Patient Safety	-0.2	-0.4	-0.2	-0.1
Communication and Care Coordination	0.2	0.7	0.3	-1.3
Acute ACSC Composite rate[a,c]	8.1	3.1	7.3	23.3
Chronic ACSC Composite rate[a,c]	58.9	29.5	57.6	86.9
30-day All-Cause Hospital Readmission rate[b,c]	15.4	15.4	15.3	16.5
Efficiency and Cost Reduction	-0.4	-7.1	-0.3	-0.7
Cost Composite Score[c]	**-0.5**	**-2.5**	**-0.7**	**3.4**
Average Per Capita Costs				
All attributed beneficiaries[c]	$11,517	$7,358	$10,906	$23,833
Diabetes[c]	$16,934	$9,482	$16,099	$32,905
COPD[c]	$26,469	$14,225	$25,212	$48,182
CAD[c]	$18,322	$8,554	$17,379	$36,638
Heart failure[c]	$26,483	$12,471	$25,186	$50,194
Average MSPB[c]	$19,378	$17,070	$19,328	$22,342

Notes: Of the 7,706 Category 1 TINs with 10 to 99 EPs, 7,019 had both a Quality and Cost Composite Score.

Measure scores shown in this table are unstandardized performance scores. Domain scores are the equally weighted average of standardized measure scores in the domain. Composite scores are the equally weighted average of non-missing domain scores.

[a] Hospital admissions per 1,000 beneficiaries.

[b] Per 100 index admissions.

[c] Higher scores indicate worse performance.

[d] Score is based results from 5 or fewer TINs.

4. Distribution of TINs by reporting mechanism

Of 13,813 Category 1 and Category 2 TINs subject to the Value Modifier in 2016, 2,125 registered to report PQRS data via one of the three group reporting mechanisms: GPRO Web Interface, qualified registry, or EHR (Table IV.18).[18] Of these, 1,820 (85.7 percent) received a Category 1 designation. Among TINs reporting via GPRO Web Interface, 90.0 percent are classified as Category 1 compared with 87.5 and 74.2 percent for TINs reporting via qualified registry or GPRO EHR, respectively.

Qualified registry was by far the most frequently used group reporting mechanism among TINs reporting via GPRO and was used by 1,469 (69.1 percent) of the 2,125 TINs reporting via GPRO. Among TINs that did not register for a GPRO, the EPs in 11,688 TINs were able to report PQRS data as individuals either via claims, a qualified registry, EHR, or QCDR. More than half (56.6 percent) of these TINs are classified as Category 1.

Table IV.18. Distribution of TINs subject to the Value Modifier, by reporting mechanism (N = 13,813 TINs)

TIN type	Number of TINs subject to the Value Modifier	Number and percentage of TINs classified as Category 1	
All TINs	13,813	8,437	61.1%
TINs that elected GPRO Web Interface, registry, or EHR	2,125	1,820	85.7%
GPRO Web Interface	300	270	90.0%
Qualified registry	1,469	1,286	87.5%
EHR	356	264	74.2%
TINs reporting as individuals	11,688	6,617	56.6%

Note: Percentages are relative to the number of TINs subject to the Value Modifier (first column) in each row.

There were major differences in the reporting mechanisms used by large and small TINs. For example, TINs with 100 or more EPs were much more likely to register to report PQRS data via a group reporting mechanism (535 TINs or 55.4 percent) than TINs with 10 to 99 EPs (1,590 TINs or 12.4 percent), as shown in Tables IV.19 and IV.20. Differences persisted even among TINs reporting via GPRO; although both GPRO Web Interface and qualified registry were commonly used by TINs with 100 or more EPs (39.1 and 48.0 percent of the 535 TINs reporting as a group), TINs with 10 to 99 EPs predominantly used qualified registry (76.2 percent of the 1,590 TINs reporting as a group). GPRO EHR was used relatively less frequently than any other reporting mechanism regardless of TIN size.

Among TINs that registered to report PQRS data as a group, those with 100 or more EPs are more likely to be considered Category 1 (92.5 percent) than TINs with 10 to 99 EPs (83.3 percent). Conversely, TINs with 10 to 99 EPs who reported as individuals are slightly more

[18] The calculation of Quality Composite Scores excluded PQRS measures reported via EHR and QCDR due to concerns about data accuracy.

likely to be Category 1 than their larger counterparts (56.7 percent and 54.8 percent, respectively).

Table IV.19. Distribution of TINs with 100 or more EPs subject to the Value Modifier, by reporting mechanism (N = 966)

TIN type	Number of TINs subject to the value modifier	Number and percentage of TINs classified as Category 1	
All TINs	966	731	75.7%
TINs that elected GPRO Web Interface, registry, or EHR	535	495	92.5%
GPRO Web Interface	209	192	91.9%
Qualified registry	257	243	94.6%
EHR	69	60	87.0%
TINs reporting as individuals	431	236	54.8%

Note: All percentages are relative to the number of TINs subject to the Value Modifier (first column) in each row.

Table IV.20 Distribution of TINs with 10 to 99 EPs subject to the Value Modifier, by reporting mechanism (N = 12,847 TINs)

TIN type	Number of TINs subject to the Value Modifier	Number and percentage of TINs classified as Category 1	
All TINs	12,847	7,706	60.0%
TINs that elected GPRO Web Interface, registry, or EHR	1,590	1,325	83.3%
GPRO Web Interface	91	78	85.7%
Qualified registry	1,212	1,043	86.1%
EHR	287	204	71.1%
TINs reporting as individuals	11,257	6,381	56.7%

Note: All percentages are relative to the first column (number of TINs subject to the Value Modifier).

TIN payment adjustment status did not differ dramatically based on reporting mechanism or physician specialty mix (Table IV.21). Category 1 TINs reporting PQRS measures via GPRO are slightly more likely to receive a downward payment adjustment (2.0 percent) compared with TINs reporting as individuals (0.3 percent). Although the percentage of TINs receiving upward and downward payment adjustments varied across the GPRO reporting mechanisms, only a very small number of TINs reporting via GPRO actually received an upward or downward payment adjustment. For example, among those TINs reporting via GPRO Web Interface, only one received an upward adjustment and only one received a downward adjustment.

TINs with a more homogeneous specialty mix are slightly less likely to receive a downward payment adjustment (0.5 percent) than TINs that are predominantly multispecialty (1.0 percent). TINs composed of 50.0 percent or more primary care physicians are slightly more likely to receive either an upward or downward payment adjustment (2.2 and 1.0 percent, respectively) than TINs with fewer than 50.0 percent primary care physicians (1.4 and 0.6 percent, respectively). Since TINs with 10 to 99 EPs are not subject to downward payment adjustments under the 2016 Value Modifier, these differences, while minor, are driven by larger TINs.

Table IV.21. Reporting Mechanism and Specialty Mix of Category 1 TINs, by payment adjustment (N = 8,437 TINs)

TIN type	Number of TINs	Upward payment adjustment		Neutral payment adjustment		Downward payment adjustment	
All TINs	8,437	128	1.5%	8,252	97.8%	57	0.7%
Reporting mechanism							
Group reporting	1,820	25	1.4%	1,759	96.7%	36	2.0%
GPRO Web Interface	270	1	0.4%	268	99.3%	1	0.4%
Qualified registry	1,286	17	1.3%	1,235	96.0%	34	2.6%
EHR	264	7	2.7%	256	97.0%	1	0.4%
Reporting as individuals	6,617	103	1.6%	6,493	98.1%	21	0.3%
Specialty mix							
Primarily multispecialty: TINs with fewer than 50% EPs in same specialty	3,151	30	1.0%	3,089	98.0%	32	1.0%
Primarily single specialty: TINs with 50% or more EPs in same specialty	5,286	98	1.9%	5,163	97.7%	25	0.5%
Primary care physicians							
TINs with fewer than 50% PCPs	7,560	109	1.4%	7,403	97.9%	48	0.6%
TINs with 50% or more PCPs	877	19	2.2%	849	96.8%	9	1.0%

5. Payment adjustment by physician specialty

Physicians of 62 different specialties billed under the 13,813 TINs subject to the 2016 Value Modifier. To identify which of the more common specialties are receiving an upward or a downward payment adjustment (Tables IV.22, IV.23, and IV.24), we analyzed the 40 specialties that had at least 1,000 physicians that billed under the TINs subject to the Value Modifier.[19] Our analyses of physician specialties considered both Category 1 *and* Category 2 TINs.

The ten specialties with the largest share of physicians that billed under TINs with an upward adjustment are allergy/immunology, nephrology, emergency medicine, ophthalmology, optometry, gastroenterology, neurology, orthopedic surgery, anesthesiology, and obstetrics/gynecology (Table IV.22). Between 1.0 and 2.8 percent of physicians in these specialties billed under TINs receiving an upward payment adjustment. For context, among the 450,543 physicians in TINs subject to the 2016 Value Modifier in specialties with at least 1,000 physicians, 0.9 percent are receiving an upward adjustment. Furthermore, of the 128 TINs receiving an upward adjustment, the percentage with each specialty varies: 3.1 percent of these TINs include allergist/immunologists and 21.1 percent include emergency medicine physicians.

[19] The remaining 22 physician specialties were excluded from this analysis since they each have fewer than 1,000 individual physicians.

Table IV.22. Specialties with largest share in Category 1 TINs receiving an upward payment adjustment

Specialty description	Number of physicians in TINs subject to the Value Modifier	Percentage in TINs receiving upward payment adjustment due to performance	Among TINs receiving upward payment adjustment, percentage with at least one EP in specialty (N =128 TINs)
All physician specialties	450,543	0.9	n/a
Allergy/immunology	1,058	2.8	3.1
Nephrology	4,611	2.6	10.2
Emergency medicine	55,216	2.4	21.1
Ophthalmology	7,344	2.4	10.2
Optometry	5,994	1.6	8.6
Gastroenterology	7,736	1.5	10.2
Neurology	8,608	1.4	7.8
Orthopedic surgery	14,608	1.3	10.2
Anesthesiology	36,715	1.2	7.8
Obstetrics/gynecology	17,951	1.0	7.0

Notes: This analysis includes only specialties with at least 1,000 physicians that billed under TINs subject to the 2016 Value Modifier. Physicians are identified by National Provider Identification number (NPI). Physician counts reflect unique NPI–TIN combinations, rather than unique physicians. Thus, physicians who billed under multiple TINs are counted multiple times in this analysis.

The second column of data shows, by specialty, physicians who billed under the 128 TINs receiving an upward payment adjustment as a percentage of all physicians of that specialty who billed under any of the 13,813 TINs subject to the 2016 Value Modifier.

The last column displays, by specialty, TINs receiving an upward payment adjustment with at least one physician of that specialty as a percentage of all 128 TINs receiving an upward payment adjustment under quality-tiering.

A TIN can receive a downward payment adjustment for one of two reasons: (1) the TIN received a Category 2 designation; or (2) the TIN performed poorly on quality measures, cost measures, or both under the quality-tiering methodology. Across all specialties, the predominant reason for receiving a downward payment adjustment is receiving a Category 2 designation; 28.0 percent of physicians billed under TINs receiving a downward adjustment due to Category 2 status whereas only 2.2 percent of physicians billed under TINs receiving a downward adjustment due to performance. This is partly because the vast majority (93.0 percent) of TINs subject to the 2016 Value Modifier—those with 10 to 99 EPs—are not subject to a downward payment adjustment due to performance under the 2016 Value Modifier; all downward payment adjustments made to these TINs are the result of Category 2 status.

Physicians in psychiatry, optometry, general practice, podiatry, pediatric medicine, family practice, physical medicine and rehabilitation, internal medicine, obstetrics/gynecology, and general surgery are most likely to receive a downward payment adjustment due to Category 2 status (Table IV.23). Psychiatry is the specialty with the largest share (64.5 percent) of physicians who billed under Category 2 TINs. Three of the four primary care physician specialties (general practice, family practice, and internal medicine) are also among the top 10 specialties with the largest share of physicians billing under Category 2 TINs (52.6 percent, 33.1 percent, and 31.9 percent, respectively). Several specialties bill under a large share of Category 2 TINs; 43.4 percent of Category 2 TINs included family practitioners, 41.7 percent included internal medicine physicians, and 30.0 percent included psychiatrists.

Table IV.23. Specialties with largest share of TINs receiving a downward payment adjustment due to Category 2 status

Specialty description	Number of physicians in TINs subject to the Value Modifier	Percentage in TINs receiving downward payment adjustment due to Category 2 status	Among Category 2 TINs, percentage with at least one physician in specialty (N = 5,376 TINs)
All specialties	450,543	28.0	n/a
Psychiatry	18,251	64.5	30.0
Optometry	5,994	54.9	5.7
General practice	2,280	52.6	11.0
Podiatry	3,254	46.3	8.1
Pediatric medicine	6,743	37.2	7.8
Family practice	53,610	33.1	43.4
Physical medicine and rehabilitation	3,915	32.1	7.8
Internal medicine	67,769	31.9	41.7
Obstetrics/gynecology	17,951	31.4	15.6
General surgery	12,869	30.6	18.7

Notes: This analysis includes only specialties with at least 1,000 physicians that billed under TINs subject to the 2016 Value Modifier. Physicians are identified by NPI. Physician counts reflect unique NPI–TIN combinations, rather than unique physicians. Thus, physicians who billed under multiple TINs are counted multiple times in this analysis.

The second column of data displays, by specialty, physicians who billed under the 5,376 TINs receiving a downward payment adjustment due to Category 2 status as a percentage of all physicians of that specialty who billed under the 13,813 TINs subject to the 2016 Value Modifier.

The last column displays, by specialty, TINs receiving a downward payment adjustment due to Category 2 status with at least one physician of that specialty as a percentage of all 5,376 TINs receiving downward payment adjustment due to Category 2 status.

Physicians in medical oncology, internal medicine, critical care, plastic and reconstructive surgery, geriatric medicine, radiation oncology, neurosurgery, thoracic surgery, hematology/oncology, and rheumatology are most likely to receive a downward payment adjustment due to performance, ranging from 2.7 to 7.3 percent of physicians in those specialties (Table IV.24). For 78.9 percent of the 57 large TINs (100 or more EPs) receiving a downward payment adjustment due to performance, there is at least one internal medicine physician billing under the TIN. Note that since there were only 57 TINs receiving a downward payment adjustment due to performance, the percentages shown in Table IV.24 represent a small number of physicians in each specialty listed.

Table IV.24. Specialties with largest share of Category 1 TINs receiving a downward payment adjustment due to performance

Specialty description	Number of physicians in TINs subject to the Value Modifier	Percentage in TINs receiving downward payment adjustment due to performance	Percentage of TINs receiving downward payment adjustment due to performance with at least one physician in specialty (N = 57 TINS)
All physician specialties	450,543	2.2	n/a
Medical oncology	2,347	7.3	28.1
Internal medicine	67,769	3.9	78.9
Critical care (intensivists)	2,530	3.6	33.3
Plastic and reconstructive surgery	1,555	3.5	21.1
Geriatric medicine	1,196	3.4	26.3
Radiation oncology	2,921	3.4	10.5
Neurosurgery	2,925	3.1	17.5
Thoracic surgery	1,443	3.1	26.3
Hematology/oncology	6,085	2.9	33.3
Rheumatology	2,271	2.7	28.1

Notes: This analysis includes only specialties with at least 1,000 physicians that billed under TINs subject to the 2016 Value Modifier. Physicians are identified by NPI. Physician counts reflect unique NPI–TIN combinations, rather than unique physicians. Thus, physicians who billed under multiple TINs are counted multiple times in this analysis.

The second column of data displays, by specialty, physicians who billed under the 57 TINs receiving a downward payment adjustment due to performance as a percentage of all physicians of that specialty who billed under the 13,813 TINs subject to the 2016 Value Modifier.

The last column displays, by specialty, TINs receiving a downward payment adjustment due to performance with at least one physician of that specialty as a percentage of all 57 TINs receiving downward payment adjustment due to performance under quality-tiering.