Medicare Special Needs Plans Performance Results: HEDIS 2016

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Prepared for

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Executive Summary

Overview

This report provides results of measurement of care provided by Special Needs Plans (SNP) to Medicare beneficiaries using Healthcare Effectiveness Data and Information Set (HEDIS®[1]) measures. (See Appendix A for additional information about HEDIS.)

As of February 2015, there were 548 SNPs participating in the program with 405 of these SNPs required to report HEDIS 2016 results by the Centers for Medicare & Medicaid Services (CMS). NCQA also received 1 submission from a SNP that had fewer than 30 beneficiaries and was not required to report because of their small enrollment. Therefore, 406 SNPs reported HEDIS 2016 results. Results for this review period cover 32 HEDIS measures: 26 clinical performance measures, 4 board certification measures and 2 utilization measures. All measures were selected for their relevance to SNP populations. As required, results were audited by NCQA-Certified HEDIS Compliance Auditors. HEDIS data reflect care provided in 2015 and reported in HEDIS 2016. The report compares HEDIS 2016 results with those reported in 2014 and 2015. The report also compares performance among different SNP types and compares SNP performance to the performance of the Medicare Advantage (MA) program as a whole.

Findings

Highest and Lowest Rates (Table 3a). The measures with the highest and lowest HEDIS 2016 rates were:

Highest Five:

1. *Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications* (1.4%) (Lower values signify better performance; this is equivalent to 98.6%).
2. *Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring* (95.3%).
3. *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring* (95.0%).
4. *Annual Monitoring for Patients on Persistent Medications—Total Rate* (94.5%).
5. *Care for Older Adults – Pain Screening* (91.0%).

Lowest Five:

1. *Medication Reconciliation Post-Discharge* (22.5%).
2. *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge* (34.0%).
3. *Use of Spirometry Testing in the Assessment and Diagnosis of COPD* (35.4%).
4. *Potential Harmful Drug Disease Interactions—Dementia* (57.9%) (Lower values signify better performance; this is equivalent to 42.1%).
5. *Potential Harmful Drug Disease Interactions—History of Falls* (54.7%) (Lower values signify better performance; this is equivalent to 45.3%).

Since the results of the *Plan All-Cause Readmissions* measure are observed to expected ratios (O/E) compared to rates for the other HEDIS measures, we could not consider them for the highest

[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

and lowest rates listings above. For HEDIS 2016, the results for the *Plan All-Cause Readmissions* were as follows: *O/E Ratio ≥65* was 0.90 and *O/E Ratio <65* was 0.89. Lower values signify better performance. Ratios below 1.0 indicate that observed readmissions were less than expect readmissions.

Three out of the five measures with the highest performance are *Annual Monitoring for Patients on Persistent Medications* indicators. Four out of five measures in the highest five are medication management measures. These measures are also reported by MA contracts, which also have high performance rates for these measures.

The five measures with the lowest performance are also reported at the MA contract-level. *Medication Reconciliation Post-Discharge* in previous years was reported at only the SNP benefit package-level; HEDIS 2016 was the first measurement year the measure was collected at the MA contract-level. Additionally, for HEDIS 2016, NCQA expanded the age range for the measure to include beneficiaries 18 years of age and older. Previously, the measures only included beneficiaries 66 years of age and older. Since this is a significant change to the measures specifications, NCQA did not trend performance on the *Medication Reconciliation Post-Discharge* measures for this report.

Largest Significant Changes (Table 3a). The measures listed below show the largest statistically significant changes, positive or negative, from HEDIS 2014–2016.

Largest Five Increase Among All Reporters:

1. *Osteoporosis Management in Women Who Had a Fracture* (19.2 percentage points).
2. *Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication* (12.9 percentage points).
3. *Care for Older Adults—Functional Status Assessment* (11.5 percentage points).
4. *Care for Older Adults—Advance Care Planning* (9.5 percentage points).
5. *Care for Older Adults—Pain Screening* (9.4 percentage points).

Largest Five Decrease Among All Reporters:

1. *Active Board Certification—Family Medicine* (3.9 percentage points).
2. *Active Board Certification—Internal Medicine* (1.8 percentage points).
3. Not Applicable – No other measure showed a statistically significant decrease.
4. Not Applicable – No other measure showed a statistically significant decrease.
5. Not Applicable – No other measure showed a statistically significant decrease.

Three of the five measures with the largest increase are *Care for Older Adults* measures, which only SNPs collect. The two measures with the largest decreases are *Active Board Certification* measures.

SNPs reporting HEDIS 2014–2016 (Table 3b). Results for SNPs that reported in all 3 years were about the same as plans that reported in any of the 3 years. The measures listed below show the largest statistically significant changes, positive or negative, from HEDIS 2014–2016, among three-year reporters.

Largest Five Increase Among 3-Year Reporters:

1. *Osteoporosis Management in Women Who Had a Fracture* (19.8 percentage points).
2. *Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication* (13.3 percentage points).
3. *Care for Older Adults—Functional Status Assessment* (12.0 percentage points).

4. *Care for Older Adults—Advance Care Planning* (10.8 percentage points).
5. *Care for Older Adults—Pain Screening* (10.3 percentage points).

Largest Five Increase Among 3-Year Reporters:

1. *Active Board Certification—Family Medicine* (1.8 percentage points).
2. *Active Board Certification—Internal Medicine* (0.2 percentage points).
3. Not Applicable – No other measure showed a statistically significant decrease.
4. Not Applicable – No other measure showed a statistically significant decrease.
5. Not Applicable – No other measure showed a statistically significant decrease.

SNP and MA program performance (Table 4). This table shows SNP program performance for the measures SNP and MA plans are required to report, in the context of overall MA program performance. SNPs report a subset of the full MA HEDIS measures set, so this report compares only the measures that are commonly report at the SNP benefit-package level and the MA contract-level.

The MA program performance was higher than the SNP program performance for 22 of 28 measures in 2016, with significant differences for 14 of these measures. The greatest difference in performance was 14.0 percentage points.

The SNP program performance as higher than the MA program for six of 28 measures, with statistically significant differences for four of these measures. The greatest statistically significant difference in performance was 1.7 percentage points.

Measures with the largest performance gaps between the MA and SNP programs plans included:

- *Controlling High Blood Pressure* (14.0 percentage points).
- All *Potentially Harmful Drug-Disease Interactions* measures (average gap of 8.4 percentage points).
- *Antidepressant Medication Management—Acute Phase* and *Continuation Phase* (6.6 and 7.2 percentage points, respectively).
- All *Active Board Certification* measures (average gap of 6.2 percentage points).

On measures where the SNPs outperformed MA plans, the largest performance gaps included the following:

- *Osteoporosis Management in Women Who Had a Fracture* (4.6 percentage points).
- *Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event* (1.7 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring, Diuretic Monitoring,* and *Total Rate* (1.5 percentage points for each measure).

Note: *MA plans report HEDIS measures at the contract level, which may include SNP beneficiaries because some MA contracts include SNP plan benefit packages. However, these represent a small portion of the overall MA population, as indicated by the eligible population data for each measure. Results were analyzed for statistically significant differences ($p < 0.05$) between SNP and other MA plan results.*

Program performance by SNP type (Table 5). Overall for HEDIS 2016, D-SNPs had higher rates on seven measures than the other SNP types, compared to 19 measures for the I-SNPs and six measures for C-SNPs.

Performance increased across all SNP types for 12 measures:

- *Colorectal Cancer Screening* (statistically significant for all SNP types).
- *Osteoporosis Management in Women Who Had a Fracture* (statistically significant for D-SNPs and C-SNPs).
- *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring* and *Diuretic Monitoring* (statistically significant for D-SNPs and I-SNPs).
- *Annual Monitoring for Patients on Persistent Medications—Total Rate* (statistically significant for all SNP types).
- *Care for Older Adults—Advance Care Planning* (statistically significant for D-SNPs only).
- *Care for Older Adults—Medication Review* (statistically significant for C-SNPs only).
- *Care for Older Adults—Pain Screening* (statistically significant for D-SNPs and C-SNPs).
- *Potentially Harmful Drug-Disease Interactions—Dementia* (statistically significant for I-SNPs and C-SNPs).
- *Potentially Harmful Drug-Disease Interactions—Total Rate* (statistically significant for I-SNPs only).
- Both *Use of High-Risk Medications in the Elderly* measures (statistically significant for all SNP types).

Performance decreased across all SNP types for four measures:

- *Controlling High Blood Pressure.*
- *Active Board Certification – Family Medicine* (statistically significant for I-SNPs)
- *Plan All-Cause Readmissions—O/E Ratio ≥65* (statistically significant for all SNP types).
- *Plan All-Cause Readmissions—O/E Ratio<65* (statistically significant for D-SNPs and C-SNPs).

D-SNPs showed statistically significant performance improvement for 11 measures (*Colorectal Cancer Screening, Osteoporosis Management in Women Who Had a Fracture, Antidepressant Medication Management--Acute Phase, Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring, Diuretic Monitoring, Total Rate, Care for Older Adults--Advance Care Planning, Functional Status Assessment, Pain Screening*; and both *Use of High-Risk Medications in the Elderly* measures) and showed a statistically significant decrease in performance for two measures (both *Plan All Cause Readmissions measures*).

I-SNPs showed statistically significant improvement for 10 measures (*Colorectal Cancer Screening*, *Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event*; all *Annual Monitoring for Patients on Persistent Medications* measures; *Potentially Harmful Drug-Disease Interactions—Dementia* and Total Rate; and both *Use of High-Risk Medications in the Elderly* measures) and showed statistically significant decreases in performance for four measures (*Antidepressant Medication Management – Acute Phase,* two *Active Board Certification* measures: *Family Medicine* and *Internal Medicine;* and *Plan All Cause Readmissions—O/E Ratio ≥65*).

C-SNPs showed statistically significant improvement on nine measures (*Colorectal Cancer Screening, Osteoporosis Management in Women Who Had a Fracture, Annual Monitoring for Patients on Persistent Medications*—Total Rate, *Care for Older Adults—Medication Review, Functional Status Assessment, Pain Screening Potentially Harmful Drug-Disease Interactions—Dementia* and both *Use of High-Risk Medications in the Elderly* measures) and statistically

significant decreases in performance for four measures (both *Follow-Up After Hospitalization for Mental Illness* measures and both *Plan All Cause Readmissions* measures).

Plan program performance by enrollment size (Table 6). This table displays program-wide performance for all SNPs by enrollment. The 0–99 enrollment category had the least amount of plans (34 in 2016) and the ≥2,500 enrollment category had the most plans (146 plans in 2016).

<99 Enrollment

- Statistically significant increases in one measure: *Potentially Harmful Drug-Disease Interactions—Dementia* (24.8 percentage points).
- Statistically significant decreases in four measures (*Care for Older Adults—Advance Care Planning, Care for Older Adults—Medication Review, Active Board Certification—Family Medicine, and Active Board Certification – Other Physician Specialists*). All measures had significant decrease of more than 10 percentage points.

100–499 Enrollment

- Statistically significant increases in four measures - both *Use of High-Risk Medications in the Elderly* measures, *Active Board Certification—Internal Medicine,* and *Active Board Certification—Geriatrics.*
- Statistically significant decreases in five measures: *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge, Care for Older Adults—Medication Review, Care for Older Adults—Pain Screening, Plan All-Cause Readmissions O/E<65,* and *Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*. The *Medication Reconciliation Post-Discharge* measure had a decrease of 31.1 percentage points.

500–999 Enrollment

- Statistically significant increases in four measures: *Potentially Harmful Drug-Disease Interactions—Dementia, Potentially Harmful Drug-Disease Interactions—Total Rate,* and both *Use of High-Risk Medications in the Elderly* measures.
- Statistically significant decreases in one measure: *Plan All-Cause Readmissions O/E ≥65*.

1,000–2,499 Enrollment

- Statistically significant increases in four measures: *Potentially Harmful Drug-Disease Interactions-Dementia*, *Potentially Harmful Drug-Disease Interactions-Total Rate*, and both *Use of High-Risk Medications in the Elderly* measures.
- Statistically significant decreases in two measures: both *Plan-All Cause Readmissions* measures.

≥2,500 Enrollment

- Statistically significant increases in 10 measures: *Colorectal Cancer Screening, Osteoporosis Management in Women Who Had a Fracture, Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring, Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring, Annual Monitoring for Patients on Persistent Medications—Total Rate, Care for Older Adults—Advance Care Planning, Care for Older Adults—Functional Status Assessment, Care for Older Adults—Pain Screening* and both *Use of High-Risk Medications in the Elderly* measures.

- Statistically significant decreases in three measures: *both Plan All-Cause Readmissions* measures and *Active Board Certification – Geriatrics*.

Plan benefit package-level performance (Table 7). In addition to the aggregate performance analyses, NCQA evaluates performance at the benefit package-level. Analyses represent results from individual plan performance. Data show a wide distribution of performance within each measure. The average difference between the 10th and 90th percentile is 24.3 percentage points. Although the average difference between the 10th and 90th percentile points has stayed relatively the same since 2015 (with a decrease of 0.1 percentage points), the average difference has decreased by 7.6 percentage points between 2014 and 2016, indicating that the gap between the highest and lowest performers is narrowing over time.

Objectives and Background

Objectives

This report presents results for SNPs reporting HEDIS 2016 performance measures. It displays SNP performance in table format and discusses performance results, provides an overview of the criteria used to select the measures and examines the data collection and validation process. The *Data Limitations* section considers the challenges and constraints of SNP assessment.

SNP Overview

SNPs were created by Congress in the Medicare Modernization Act (MMA) of 2003, as a new type of Medicare managed care plan that focuses on certain vulnerable groups of Medicare beneficiaries. Unlike other types of MA plans, SNPs may limit enrollment to the following subgroups:

- *Dual-Eligible SNPs (D-SNP)* enroll beneficiaries eligible for Medicare and Medicaid.
- *Institutional SNPs (I-SNP)* enroll beneficiaries who are institutionalized or are determined by use of a State assessment tool, to meet institutional level of care. Those that meet the institutional level of care can live in the community and be enrolled in the I-SNP.
- *Chronic SNPs (C-SNP)* enroll beneficiaries with certain chronic or disabling conditions.

(Refer to Table 1 for further comparison of SNPs to MA plans.) The MMA stated that SNPs should emphasize monitoring health status, managing chronic diseases, avoiding inappropriate hospitalizations and helping beneficiaries maintain or improve their health status. Originally, SNP authority was set to expire in December 2008, but Congress has subsequently acted to revise and extend the program beyond that period.

Table 1. Key Differences Between SNPs and Standard MA Plans

Categories	SNPs	MA Plans
Enrollment	• Must limit enrollment to targeted special needs individuals (i.e., dual eligible beneficiaries, those with specific chronic or disabling conditions, or living in or eligible for residing in an institutional setting). • May target specific subsets of special needs populations (e.g., beneficiaries with congestive heart failure or diabetes). • Dual-eligible and institutionalized beneficiaries may enroll and disenroll throughout the year. Chronic care beneficiaries have a one-time enrollment option outside of standard enrollment periods.	• Must be open to all Medicare-eligible beneficiaries. • Lock-in provision for all enrollees with an annual open-enrollment period.
Benefits	• Standard MA benefits. • Must offer Part D prescription drug coverage.	• Standard MA benefits. • Part D coverage is voluntary.
Payments	• Standard MA geographic payment schedule, with PMPM payments risk-adjusted by hierarchical condition category (HCC) scores.	
Marketing	• May target special needs populations in the market area. • May target specific subsets of special needs populations (on a case-by-case basis) in the market area.	• Must include all Medicare-eligible beneficiaries in the market area.

CMS SNP HEDIS Reporting Requirement

Starting in 2009, CMS required every SNP benefit package (identified by a CMS Plan ID) with 30 or more enrollees to submit audited HEDIS results each year. SNPs listed in the February *SNP Comprehensive Report* as having 29 enrollees or fewer are not required to submit HEDIS measures the following year. Any SNP that meets the enrollment criteria must also exist in both the measurement year and the reporting years. Plans that terminate as of December 31, 2016, are required to report if they were in operation for the full 2016 calendar year. As of February 2015, 405 out of 548 SNPs identified by CMS were required to submit data for this report.

Table 2 illustrates the total submissions for HEDIS measures during the last three collection periods.

Table 2. SNP Enrollment as of February 2013, 2014 and 2015

SNP Type and Year	SNPs Required to Report HEDIS Measures	
	Number of SNPs	Enrollment
2013 (Reported HEDIS 2014)		
Chronic or Disabling Condition	68	283,068
Dual-Eligible	245	1,534,024
Institutional	40	48,936
2013 Total	353	1,866,028
2014 (Reported HEDIS 2015)		
Chronic or Disabling Condition	112	272,255
Dual-Eligible	266	1,403,045
Institutional	42	48,956
2014 Total	420[2]	1,724,256
2015 (Reported HEDIS 2016)		
Chronic or Disabling Condition	111	284,019
Dual-Eligible	265	1,491,557
Institutional	30	31,631
2015 Total	406[3]	1,807,207

For an individual plan's measure result to be public reported, NCQA requires a denominator of at least 30 enrollees for the measure. Denominators below this size do not support publically reporting individual plan rates. Measures that have a broader reach (e.g., screening measures such as *Colorectal Cancer Screening)* tend to have a larger percentage of publically reportable plans; measures with a narrower specification (e.g., measures requiring a specific condition or event, such as *Persistence of Beta-Blocker Treatment After a Heart Attack, Osteoporosis Management in Women Who Had a Fracture*) tend to have a lower percentage of publically reportable plans. Table

[2] Two SNPs submitted HEDIS 2015 data although they were not required to submit HEDIS measures due to their small enrollment size. The number required to report was 418.

[3] One SNP submitted HEDIS 2016 data although they were not required to submit HEDIS measures due to their small enrollment size. The number required to report was 405.

9a in the report shows the total number and percentage of plans reporting each measure and the number and percentage of plans with denominators above or below 30 for each measure.

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HEDIS Results

SNP Program Performance Changes, HEDIS 2014–2016 (Tables 3a and 3b)

Tables 3a and 3b show a three-year trend in SNP performance on HEDIS measures. The two tables differ as follows:

- **Table 3a shows results aggregated across plans for the SNP program as a whole (2014–2016).** It includes measure results from all SNPs that reported in any of the three years. For the analysis presented in this table, results for statistical significance tests between HEDIS 2014 and 2016 and between HEDIS 2015 and 2016 were based on a non-paired t-test ($p < 0.05$).
- **Table 3b shows results only for SNPs that reported HEDIS measures in all three reporting years (2014–2016).** It includes the results for statistically significant differences between HEDIS 2014 and HEDIS 2016 and between HEDIS 2015 and HEDIS 2016, using a paired t-test ($p < 0.05$) to illustrate performance differences among the same group of SNPs between different time periods.

Although 32 measures were collected in HEDIS 2016, we did not include data for measures where changes in the specifications made year-to-year analyses impossible. There are 32 measures; eight had some form of trend break due to a change in specification that prevent comparison across the three-year period.

All SNPs reporting in any of the three years (Table 3a). Program wide results for all SNPs were mixed. Trends below account for 25 measures collected in HEDIS 2014 and for 32 measures collected in HEDIS 2015 and 2016. It should be noted that small increases, even below 1 percentage point, can be statistically significant given the large number of observations collected.

- **HEDIS 2014: 2016 (3-Year Trend)**

– Statistically significant increases: 11 measures.
– Statistically significant decreases: 2 measures.

- **HEDIS 2015: 2016 (2-Year Trend)**

– Statistically significant increases: 13 measures.
– Statistically significant decreases: 3 measures.

Highest and Lowest Rates (Table 3a). The measures with the highest and lowest HEDIS 2016 rates were:

Highest Five:

1. *Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications* (1.4%) (Lower values signify better performance; this is equivalent to 98.6%).
2. *Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring* (95.3%).
3. *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring* (95.0%).
4. *Annual Monitoring for Patients on Persistent Medications—Total Rate* (94.5%).
5. *Care for Older Adults – Pain Screening (91.0%)*

Lowest Five:

1. *Medication Reconciliation Post-Discharge* (22.5%).
2. *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge* (34.0%).
3. *Use of Spirometry Testing in the Assessment and Diagnosis of COPD* (35.4%).
4. *Potential Harmful Drug Disease Interactions—Dementia* (57.9%) (Lower values signify better performance; this is equivalent to 42.1%).
5. *Potential Harmful Drug Disease Interactions—History of Falls* (54.7%) (Lower values signify better performance; this is equivalent to 45.3%).

Since the results of the *Plan All-Cause Readmissions* measure are observed to expected ratios (O/E) compared to rates for the other HEDIS measures, we could not consider them for the highest and lowest rates listings above. For HEDIS 2016, the results for the *Plan All-Cause Readmissions* were as follows: *O/E Ratio ≥65* was 0.90 and *O/E Ratio <65* was 0.89. Lower values signify better performance. Ratios below 1.0 indicate that observed readmissions were less than expect readmissions.

Three out of the five measures with the highest performance are *Annual Monitoring for Patients on Persistent Medications* indicators. Four out of five measures in the highest five are medication management measures. These measures are also reported by MA contracts, which also have high performance rates for these measures.

The five measures with the lowest performance are also reported at the MA contract-level. *Medication Reconciliation Post-Discharge* in previous years was only reported at the SNP benefit package-level; HEDIS 2016 was the first measurement year the measure was collected at the MA contract-level. Additionally, for HEDIS 2016, NCQA expanded the age range for the measure to include beneficiaries 18 years of age and older. Previously, the measures only included beneficiaries 66 years of age and older. Since this is a significant change to the measures specifications, NCQA did not trend performance on the *Medication Reconciliation Post-Discharge* measures for this report.

Largest Significant Changes (Table 3a). The measures listed below show the largest statically significant changes, positive or negative, from HEDIS 2014–2016. The measures with the largest increases showed a 9.4 percentage point or greater rate increase. The measures with the largest decreases showed a 0.7 percentage point or greater rate decrease.

Largest Five Increase Among All Reporters:

1. *Osteoporosis Management in Women Who Had a Fracture* (19.2 percentage points).
2. *Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication* (12.9 percentage points).
3. *Care for Older Adults—Functional Status Assessment* (11.5 percentage points).
4. *Care for Older Adults—Advance Care Planning* (9.5 percentage points).
5. *Care for Older Adults—Pain Screening* (9.4 percentage points).

Largest Five Decrease Among All Reporters:

1. *Active Board Certification—Family Medicine* (3.9 percentage points).
2. *Active Board Certification—Internal Medicine* (1.8 percentage points).
3. Not Applicable – No other measure showed a statistically significant decrease.
4. Not Applicable – No other measure showed a statistically significant decrease.
5. Not Applicable – No other measure showed a statistically significant decrease.

Three of the five measures with the largest increase are *Care for Older Adults* measures, which only SNPs collect. The two measures with the largest decreases are *Active Board Certification* measures.

Measures only SNPs report (3a). There are four HEDIS measures that only SNPs report *(Care for Older Adults—Advance Care Planning, Care for Older Adults—Functional Status Assessment, Care for Older Adults—Medication Review, Care for Older Adults—Pain Screening)*. All *Care for Older Adults* measures showed improvement that were statistically significant for HEDIS 2016.

SNPs reporting HEDIS 2014–2016 (Table 3b). Results for SNPs that reported in all 3 years were about the same as plans that reported in any of the 3 years. Fifteen measures with trendable data showed statistically significant improvement over the entire period and 11 measures showed statistically significant improvement from 2015–2016. Two measures showed statistically significant decline over the entire period and from 2015–2016.

The measures listed below show the largest statistically significant changes, positive or negative, from HEDIS 2014–2016, among three-year reporters.

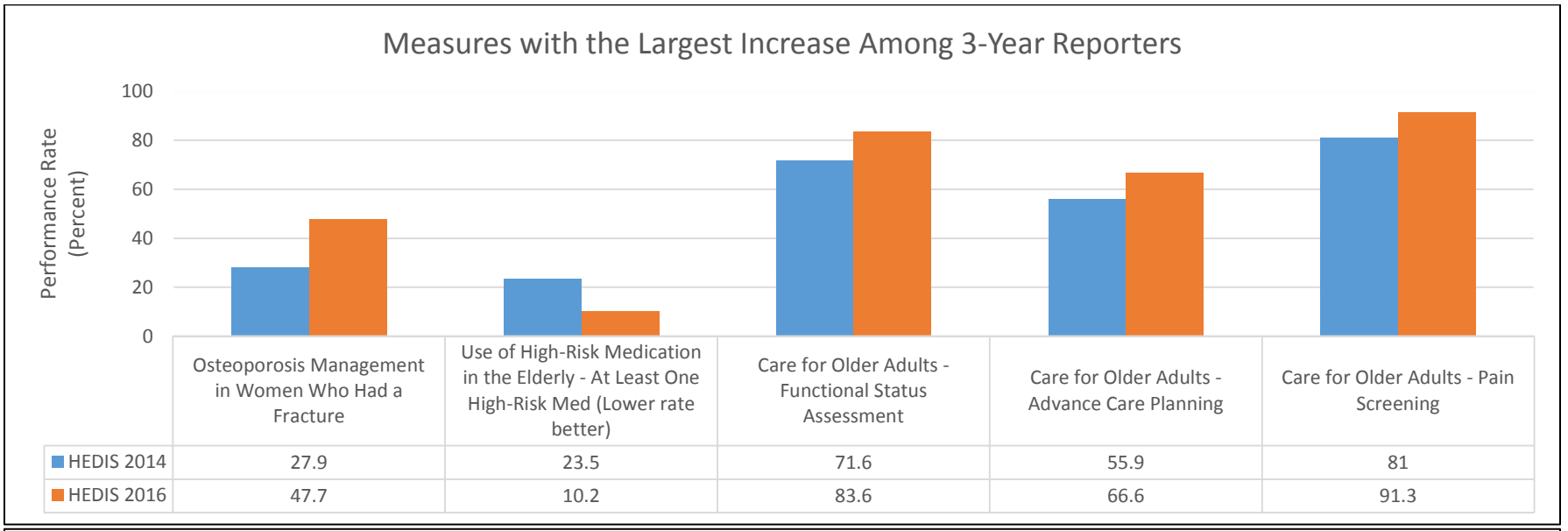
Largest Five Increase Among 3-Year Reporters:

1. *Osteoporosis Management in Women Who Had a Fracture* (19.8 percentage points).
2. *Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication* (13.3 percentage points).
3. *Care for Older Adults—Functional Status Assessment* (12.0 percentage points).
4. *Care for Older Adults—Advance Care Planning* (10.8 percentage points).
5. *Care for Older Adults—Pain Screening* (10.3 percentage points).

Largest Five Increase Among 3-Year Reporters:

1. Active Board Certification—Family Medicine (1.8 percentage points).
2. Active Board Certification—Internal Medicine (0.2 percentage points).
3. Not Applicable – No other measure showed a statistically significant decrease
4. Not Applicable – No other measure showed a statistically significant decrease.
5. Not Applicable – No other measure showed a statistically significant decrease.

See the next page for a graphical representation of the five measures with the largest increase and decreases among SNPs that reported in all three of the last periods (HEDIS 2014–2016).


Measures with the Largest Increase Among 3-Year Reporters
Performance Rate (Percent)
100
80
60
40
20
0
Osteoporosis Management in Women Who Had a Fracture
Use of High-Risk Medication in the Elderly - At Least One High-Risk Med (Lower rate better)
Care for Older Adults - Functional Status Assessment
Care for Older Adults - Advance Care Planning
Care for Older Adults - Pain Screening
HEDIS 2014 27.9 23.5 71.6 55.9 81
HEDIS 2016 47.7 10.2 83.6 66.6 91.3

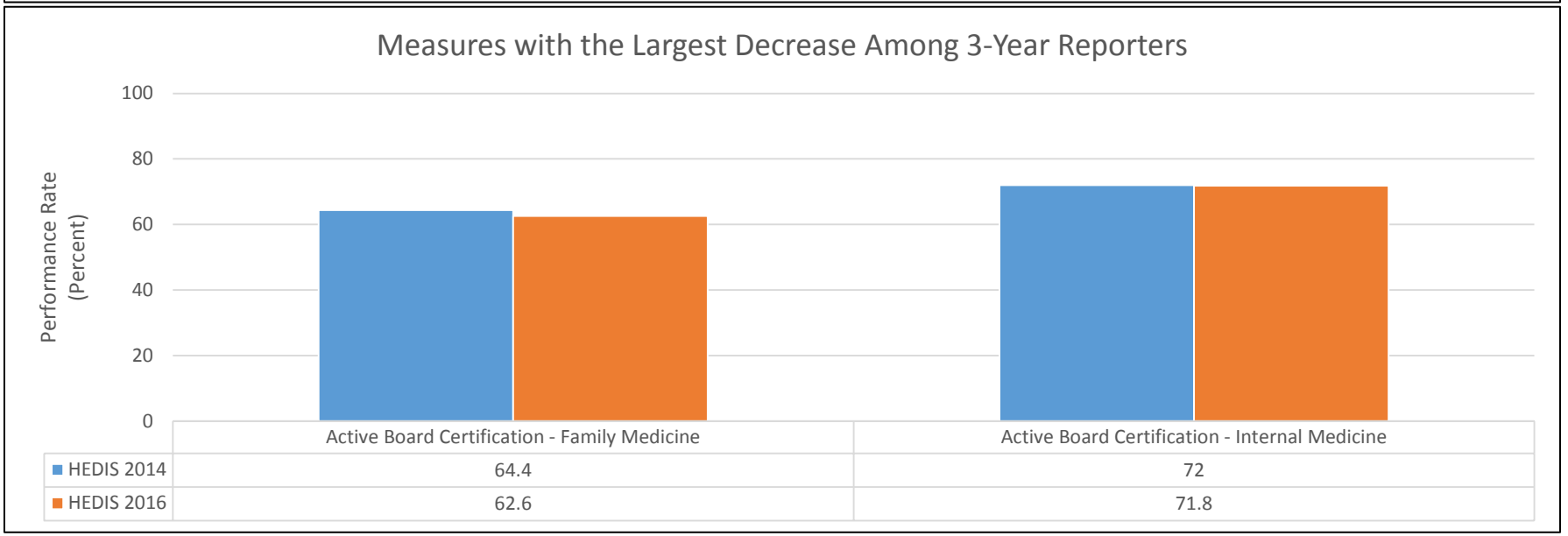

Measures with the Largest Decrease Among 3-Year Reporters
Performance Rate (Percent)
100
80
60
40
20
0
Active Board Certification - Family Medicine
Active Board Certification - Internal Medicine
HEDIS 2014 64.4 72
HEDIS 2016 62.6 71.8

Table 3a. HEDIS Performance for SNP Program, HEDIS 2014, 2015 and 2016

This table includes all SNP results combined, for all plans that reported in any of the three years.

Measure	HEDIS 2014	HEDIS 2015	HEDIS 2016		CHANGE	
	Overall Rate	Overall Rate	Eligible Population	Overall Rate	2014–2016	2015–2016
Colorectal Cancer Screening	66.7	68.9	663,444	72.5	5.8**	3.6**
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	33.1	34.1	37,671	35.4	2.3	0.1
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	67.3	68.1	40,235	68.4	1.1	0.3
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	80.9	81.5	40,235	80.9	0.0	-0.6
Controlling High Blood Pressure	NA	62.0	786,634	60.2	NA	-1.8
Persistence of Beta-Blocker Treatment After a Heart Attack	88.8	89.9	7,194	90.0	1.2	0.1
Osteoporosis Management in Women Who Had a Fracture	28.2	37.6	9,447	47.4	19.2**	9.7**
Antidepressant Medication Management—Acute Phase	60.2	61.5	62,241	63.1	3.0**	1.7**
Antidepressant Medication Management—Continuation Phase	46.0	46.1	62,241	47.5	1.5	1.4
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	53.0	54.6	28,419	51.7	-1.2	-2.9**
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	32.8	35.3	28,419	34.0	1.2	-1.3
Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring	NA	94.5	725,088	95.0	NA	0.6**
Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring	NA	55.4	17,828	55.2	NA	-0.1
Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring	NA	94.7	464,678	95.3	NA	0.6**
Annual Monitoring for Patients on Persistent Medications—Total Rate	NA	93.8	1,207,594	94.5	NA	0.7**
Medication Reconciliation Post-Discharge	NA	NA	394,506	22.5	NA	NA
Care for Older Adults—Advance Care Planning	55.6	60.9	1,021,030	65.1	9.5**	4.3**

Measure	HEDIS 2014	HEDIS 2015	HEDIS 2016		CHANGE	
	Overall Rate	Overall Rate	Eligible Population	Overall Rate	2014–2016	2015–2016
Care for Older Adults—Medication Review	82.7	88.5	1,021,032	89.5	6.7**	0.9
Care for Older Adults—Functional Status Assessment	71.6	78.9	1,021,032	83.2	11.5**	4.2**
Care for Older Adults—Pain Screening	81.6	88.6	1,021,032	91.0	9.4**	2.4**
Active Board Certification—Family Medicine	62.8	60.5	857,387	59.0	-3.9**	-1.5
Active Board Certification—Internal Medicine	71.6	69.0	1,009,583	69.9	-1.8**	0.9
Active Board Certification—Geriatrics	49.4	46.3	45,092	49.1	-0.3	2.8
Active Board Certification—Other Physician Specialists	69.4	70.0	3,616,091	69.5	0.1	-0.6
Potentially Harmful Drug-Disease Interactions—History of Falls*	54.1	54.8	56,913	54.7	-0.7	0.1
Potentially Harmful Drug-Disease Interactions—Dementia*	61.1	60.0	76,995	57.9	3.1**	2.1**
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*	17.1	17.1	38,920	16.9	0.3	0.3
Potentially Harmful Drug-Disease Interactions—Total Rate*	49.9	49.2	172,828	47.6	2.3**	1.6**
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication*	23.2	15.8	995,877	10.3	12.9**	5.5**
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications*	4.8	2.7	995,877	1.4	3.3**	1.3**
Plan All-Cause Readmissions (O/E Ratio ≥65)* †	NA	0.76	213,322	0.90	NA	-0.1**
Plan All-Cause Readmissions (O/E Ratio <65)* †	NA	0.80	121,320	0.89	NA	-0.1**

*Lower values signify better performance.

**Denotes a statistically significant difference ($p<0.05$) between years for which rates are compared.

†No statistical testing is done for differences in the *Plan All-Cause Readmissions* measure because risk-adjusted comparisons cannot be made using a t-test. A proper test requires the availability of plan-level confidence intervals for each O/E ratio. Because total variance was not reported properly by most plans in 2014, statistical tests for *Plan All-Cause Readmissions* are not possible.

Shaded cells that contain "NA" (Not Applicable) represent a trend break where year-to-year comparison is not possible.

Table 3b. HEDIS Performance for Three-Year Reporting SNPs, HEDIS 2014, 2015 and 2016

This table shows population-based results only for SNPs that reported HEDIS 2014, 2015 and 2016 results.

Measure	HEDIS 2014	HEDIS 2015	HEDIS 2016		CHANGE	
	Overall Rate	Overall Rate	Eligible Population	Overall Rate	2014–2016	2015–2016
Colorectal Cancer Screening	67.4	69.5	586,391	72.9	5.5**	3.4**
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	33.6	34.8	34,830	35.6	2.0	0.8
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	67.0	67.9	32,899	68.5	1.5**	0.6
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	80.6	81.6	32,899	80.8	0.2	-0.8
Persistence of Beta-Blocker Treatment After a Heart Attack	88.9	89.9	6,179	89.8	0.8	-0.1
Osteoporosis Management in Women Who Had a Fracture	27.9	38.9	8,372	47.7	19.8**	8.8**
Antidepressant Medication Management—Acute Phase	59.8	61.5	53,598	63.3	3.6**	1.9**
Antidepressant Medication Management—Continuation Phase	45.6	46.1	53,598	47.4	1.8	1.4
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	53.9	55.1	23,993	52.3	-1.6	-2.9**
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	33.6	35.9	23,993	34.6	1.0**	-1.3
Care for Older Adults—Advance Care Planning	55.9	61.9	871,294	66.6	10.8**	4.7**
Care for Older Adults—Medication Review	81.9	88.8	875,502	89.6	7.7**	0.9
Care for Older Adults—Functional Status Assessment	71.6	79.2	875,502	83.6	12.0**	4.4**
Care for Older Adults—Pain Screening	81.0	89.3	875,502	91.3	10.3**	1.9**
Active Board Certification—Family Medicine	64.4	62.9	421,492	62.6	-1.8**	-0.3**
Active Board Certification—Internal Medicine	72.0	70.5	553,089	71.8	-0.2**	1.3
Active Board Certification—Geriatrics	52.4	53.3	23,497	54.5	2.1**	1.2**

Measure	HEDIS 2014	HEDIS 2015	HEDIS 2016		CHANGE	
	Overall Rate	Overall Rate	Eligible Population	Overall Rate	2014–2016	2015–2016
Active Board Certification—Other Physician Specialists	70.5	72.1	1,790,505	73.7	3.2**	1.6
Potentially Harmful Drug-Disease Interactions—History of Falls*	53.5	54.4	50,846	54.4	-0.9	0.0
Potentially Harmful Drug-Disease Interactions—Dementia*	60.6	59.8	69,103	57.7	2.9**	2.1**
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*	16.8	17.3	34,652	17.1	-0.2	0.2
Potentially Harmful Drug-Disease Interactions—Total Rate*	49.3	49.0	154,601	47.5	1.7**	1.4**
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication*	23.5	15.7	850,465	10.2	13.3**	5.5**
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications*	4.8	2.7	850,465	1.4	3.4**	1.3**

*Lower values signify better performance.

**Denotes a statistically significant difference ($p<0.05$) between years for which rates are compared.

SNP Program and MA Program Performance (Table 4)

SNP and MA program performance (Table 4). This table shows SNP program performance for the measures SNP and MA plans are required to report, in the context of overall MA program performance. SNPs report a subset of the full MA HEDIS measures set, so this report compares only the measures that are commonly report at the SNP benefit-package level and the MA contract-level.

The MA program performance was higher than the SNP program performance for 22 of 28 measures in 2016, with significant differences for 14 of these measures. The greatest difference in performance was 14.0 percentage points.

The SNP program performance as higher than the MA program for six of 28 measures, with statistically significant differences for four of these measures. The greatest statistically significant difference in performance was 1.7 percentage points.

Measures with the largest performance gaps between the MA and SNP programs plans included:

- *Controlling High Blood Pressure* (14.0 percentage points).
- All *Potentially Harmful Drug-Disease Interactions* measures (average gap of 8.4 percentage points).
- *Antidepressant Medication Management—Acute Phase* and *Continuation Phase* (6.6 and 7.2 percentage points, respectively).
- All *Active Board Certification* measures (average gap of 6.2 percentage points).

On measures where the SNPs outperformed MA plans, the largest performance gaps included the following:

- *Osteoporosis Management in Women Who Had a Fracture* (4.6 percentage points).
- *Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event* (1.7 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring, Diuretic Monitoring,* and *Total Rate* (1.5 percentage points for each measure).

Note: *MA plans report HEDIS measures at the contract level, which may include SNP beneficiaries because some MA contracts include SNP plan benefit packages. However, these represent a small portion of the MA population, as indicated by the eligible population data for each measure. Results were analyzed for statistically significant differences ($p < 0.05$) between SNP and other MA plan results.*

Table 4. HEDIS 2016 Performance for SNP Program and MA Program

This table shows population-based performance for all SNPs and all MA plans.

Measures	SNPs		MA Organizations		Performance Gap in Rates (SNP—MA)	
	Eligible Population	Overall Rate	Eligible Population	Overall Rate	2015	2016
Colorectal Cancer Screening	663,444	72.5	7,309,292	73.7	-3.1**	-1.2
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	37,671	35.4	312,160	37.8	-3.5**	-2.4
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	40,235	68.4	176,338	72.9	-3.9**	-4.5**
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	40,235	80.9	176,338	79.2	2.6**	1.7**
Controlling High Blood Pressure	786,634	60.2	7,060,759	74.2	-13.1**	-14.0**
Persistence of Beta-Blocker Treatment After a Heart Attack	7,194	90.0	55,150	90.9	-0.6	-0.9
Osteoporosis Management in Women Who Had a Fracture	9,447	47.4	102,638	42.8	-1.9	4.4
Antidepressant Medication Management—Acute Phase	62,241	63.0	367,767	69.8	-6.6**	-6.7**
Antidepressant Medication Management—Continuation Phase	62,241	47.5	367,767	54.7	-7.0**	-7.2**
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	28,419	51.7	87,122	52.4	0.3	-0.7
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	28,419	34.0	87,122	33.6	0.8	0.4
Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring	725,088	95.0	5,836,051	89.6	1.2**	1.0**
Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring	17,828	55.2	159,710	53.6	-0.4	-2.0
Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring	464,678	95.3	3,879,528	90.1	1.3**	1.2**
Annual Monitoring for Patients on Persistent Medications—Total Rate	1,207,594	94.5	9,875,289	89.2	1.3**	1.1**

Measures	SNPs		MA Organizations		Performance Gap in Rates (SNP—MA)	
	Eligible Population	Overall Rate	Eligible Population	Overall Rate	2015	2016
Medication Reconciliation Post-Discharge[4]	394,506	22.5	2,707,391	24.0	—	-2.3
Care for Older Adults—Advance Care Planning	1,021,030	65.1	***	***	—	—
Care for Older Adults—Medication Review	1,021,032	89.5	***	***	—	—
Care for Older Adults—Functional Status Assessment	1,021,032	83.2	***	***	—	—
Care for Older Adults—Pain Screening	1,021,032	91.0	***	***	—	—
Active Board Certification—Family Medicine	857,387	59.0	1,026,447	66.5	-8.3**	-7.5**
Active Board Certification—Internal Medicine	1,009,583	69.9	1,276,792	74.2	-5.6**	-4.3**
Active Board Certification—Geriatrics	45,092	49.1	59,638	57.0	-7.8**	-8.0**
Active Board Certification—Other Physician Specialists	3,616,091	69.5	4,106,250	74.4	-4.7**	-4.9**
Potentially Harmful Drug-Disease Interactions—History of Falls*	56,913	54.7	615,423	46.7	-8.2**	-8.0**
Potentially Harmful Drug-Disease Interactions—Dementia*	76,995	57.9	557,035	47.1	-11.0**	-10.8**
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*	38,920	16.9	268,758	9.6	-7.1**	-7.2**
Potentially Harmful Drug-Disease Interactions—Total Rate*	172,828	47.6	1,441,216	39.9	-8.3**	-7.7**
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication*	995,877	10.3	11,752,749	9.2	-4.0**	-1.1
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications*	995,877	1.4	11,752,749	1.1	-1.0**	-0.3
Plan All-Cause Readmissions (O/E Ratio ≥65)*	213,322	0.90	1,968,728	0.85	-0.02**	-0.05**
Plan All-Cause Readmissions (O/E Ratio <65)*	121,320	0.89	396,736	0.88	-0.03**	-0.02**

*Lower values signify better performance.

**Denotes a statistically significant difference (p<0.05) between years for which rates are compared.

***Data are not reported by MA plans

Cells with a dash (—) indicate that there were no data for calculation.

[4] *Medication Reconciliation Post-Discharge* started to be collected at the MA contract-level in HEDIS 2016, so a 2015 rate was not available to calculate a performance gap between 2015 and 2016.

SNP Program Performance by SNP Type (Table 5)

Program performance by SNP type. Overall for HEDIS 2016, D-SNPs had higher rates on seven measures than the other SNP types, compared to 19 measures for the I-SNPs and six measures for C-SNPs.

Performance increased across all SNP types for 12 measures:

- *Colorectal Cancer Screening* (statistically significant for all SNP types).
- *Osteoporosis Management in Women Who Had a Fracture* (statistically significant for D-SNPs and C-SNPs).
- *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring* and *Diuretic Monitoring* (statistically significant for D-SNPs and I-SNPs).
- *Annual Monitoring for Patients on Persistent Medications—Total Rate* (statistically significant for all SNP types).
- *Care for Older Adults—Advance Care Planning* (statistically significant for D-SNPs only).
- *Care for Older Adults—Medication Review* (statistically significant for C-SNPs only).
- *Care for Older Adults—Pain Screening* (statistically significant for D-SNPs and C-SNPs).
- *Potentially Harmful Drug-Disease Interactions—Dementia* (statistically significant for I-SNPs and C-SNPs).
- *Potentially Harmful Drug-Disease Interactions—Total Rate* (statistically significant for I-SNPs only).
- Both *Use of High-Risk Medications in the Elderly* measures (statistically significant for all SNP types).

Performance decreased across all SNP types for four measures:

- *Controlling High Blood Pressure.*
- *Active Board Certification – Family Medicine* (statistically significant for I-SNPs).
- *Plan All Cause Readmissions—O/E Ratio ≥65* (statistically significant for all SNP types).
- *Plan All Cause Readmissions—O/E Ratio<65* (statistically significant for D-SNPs and C-SNPs).

D-SNPs showed statistically significant performance improvement for 11 measures and a statistically significant performance decrease for two measures:

Improvement:

- *Colorectal Cancer Screening* (3.1 percentage points).
- *Osteoporosis Management in Women Who Had a Fracture* (6.1 percentage points).
- *Antidepressant Medication Management—Acute Phase* (1.9 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring* (0.6 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring* (0.6 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Total Rate* (0.7 percentage points).
- *Care for Older Adults--Advance Care Planning* (5.2 percentage points).

- *Care for Older Adults--Functional Status Assessment* (4.7 percentage points).
- *Care for Older Adults--Pain Screening* (2.5 percentage points).
- *Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication* (4.9 percentage points).
- *Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications* (1.2 percentage points).

Decrease:

- *Plan All Cause Readmissions—O/E Ratio ≥65* (0.13).
- *Plan All Cause Readmissions—O/E Ratio <65* (0.08).

I-SNPs showed statistically significant improvement for 10 measures and showed statistically significant decreases in performance for four measures:

Improvement:

- *Colorectal Cancer Screening* (14.1 percentage points).
- *Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event* (19.5 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring* (3.3 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring* (8.2 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring* (2.6 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Total Rate* (3.2 percentage points).
- *Potentially Harmful Drug-Disease Interactions—Dementia* (6.9 percentage points).
- *Potentially Harmful Drug-Disease Interactions—Total Rate* (5.4 percentage points).
- *Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication* (4.6 percentage points).
- *Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications* (1.1 percentage points).

Decrease:

- *Antidepressant Medication Management – Acute Phase* (9.9 percentage points).
- *Active Board Certification—Family Medicine* (5.2 percentage points).
- *Active Board Certification—Internal Medicine* (2.8 percentage points).
- *Plan All Cause Readmissions—O/E Ratio ≥65* (0.10).

C-SNPs showed statistically significant improvement in performance on nine measures and statistically significant decreases in performance for four measures:

Improvement:

- *Colorectal Cancer Screening* (4.6 percentage points).
- *Osteoporosis Management in Women Who Had a Fracture* (20.1 percentage points).

- *Annual Monitoring for Patients on Persistent Medications—Total Rate* (0.6 percentage points).
- *Care for Older Adults—Medication Review* (2.8 percentage points).
- *Care for Older Adults—Functional Status Assessment* (3.7 percentage points).
- *Care for Older Adults—Pain Screening* (2.4 percentage points).
- *Potentially Harmful Drug-Disease Interactions—Dementia* (4.1 percentage points).
- *Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication* (8.1 percentage points).
- *Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications* (1.6 percentage points).

Decrease:

- *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge* (16.1 percentage points).
- *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge* (10.6 percentage points).
- *Plan All Cause Readmissions—O/E Ratio ≥65* (0.15).
- *Plan All Cause Readmissions—O/E Ratio <65* (0.13).

Table 5. SNP Overall Program Performance by SNP Type, HEDIS 2015 and 2016

This table displays program-wide results for all SNPs, by SNP type.

Measure	DUAL SNPS					INSTITUTIONAL SNPS					CHRONIC SNPS				
	2016		2015		2016 vs 2015	2016		2015		2016 vs 2015	2016		2015		2016 vs 2015
	#	Rate	#	Rate	Change	#	Rate	#	Rate	Change	#	Rate	#	Rate	Change
Colorectal Cancer Screening	265	71.9**	264	68.8	3.1**	30	52.1**	42	38.0**	14.1**	111	75.7**	112	71.2	4.6**
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	265	33.9	264	32.9**	1.0	30	6.8**	42	9.4**	-2.5	111	43.5**	112	43.1**	0.4
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	261	68.5	264	68.6	-0.1	30	55.9	42	36.4**	19.5**	102	67.8	112	66.9	0.9
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	261	82.2	264	83.0**	-0.8	30	73.0	42	71.6	1.4	102	73.6	112	74.7	-1.1
Controlling High Blood Pressure	261	63.0	257	64.9	-1.8	30	67.5	40	75.9	-8.4	111	49.8	111	50.6	-0.8
Persistence of Beta-Blocker Treatment After a Heart Attack	265	90.8	264	90.6	0.3	30	88.5	42	91.7	-3.2	111	87.5	112	87.6	-0.1
Osteoporosis Management in Women Who Had a Fracture	265	45.0	260	38.9	6.1**	30	29.3	42	17.1**	12.2	111	57.1**	112	37.1	20.1**
Antidepressant Medication Management—Acute Phase	265	62.7	264	60.8	1.9**	30	68.7	42	78.5**	-9.9**	111	65.3	112	63.4	1.9
Antidepressant Medication Management—Continuation Phase	265	47.1	264	45.5	1.6	30	61.2	42	71.1**	-9.9	111	49.5	112	47.6	1.9
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	263	53.0	264	55.0	-2.0	30	25.8	42	18.4**	7.4	110	37.6	112	53.7	-16.1**
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	263	3	264	35.6	-0.7	30	20.5	42	15.4	5.1	110	24.0	112	34.6	-10.6**

Measure	DUAL SNPS					INSTITUTIONAL SNPS					CHRONIC SNPS				
	2016		2015		2016 vs 2015	2016		2015		2016 vs 2015	2016		2015		2016 vs 2015
	#	Rate	#	Rate	Change	#	Rate	#	Rate	Change	#	Rate	#	Rate	Change
Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring	265	94.7**	264	94.1	0.6**	30	99.0	42	99.2**	3.3**	111	96.0**	112	95.7	0.3
Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring	265	53.9	264	54.3	-0.4	30	97.0**	42	97.5**	8.2**	111	53.0	112	51.1	1.9
Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring	265	94.9**	264	94.3**	0.6**	30	99.0	42	99.2**	2.6**	111	96.2**	112	96.0	0.3
Annual Monitoring for Patients on Persistent Medications—Total Rate	265	94.3**	264	93.6**	0.7**	30	98.9	42	99.1**	3.2**	111	95.3**	112	94.7	0.6**
Medication Reconciliation Post-Discharge	264	23.8	NA	NA	NA	29	17.5	NA	NA	NA	111	17.0	NA	NA	NA
Care for Older Adults—Advance Care Planning	265	63.8	264	58.7	5.2**	30	21.1	42	97.4**	2.6	111	67.0	112	64.4	2.6
Care for Older Adults—Medication Review	265	88.2	264	87.7**	0.5	30	22.3**	42	96.7	2.0	111	93.7	112	90.8	2.8**
Care for Older Adults—Functional Status Assessment	265	81.8**	264	77.1**	4.7**	30	21.5**	42	97.3	-0.4	111	86.9	112	83.3**	3.7**
Care for Older Adults—Pain Screening	265	89.9	264	87.4**	2.5**	30	21.2**	42	98.1	0.1	111	94.5	112	92.1	2.4**
Active Board Certification—Family Medicine	249	58.1	247	59.6	-1.5	30	71.3**	42	76.5**	-5.2**	110	55.3	110	55.9	-0.6
Active Board Certification—Internal Medicine	249	69.1**	247	68.2**	0.8	30	76.8**	42	79.5**	-2.8**	110	65.7**	110	63.1**	2.6
Active Board Certification—Geriatrics	249	48.9**	247	47.0**	1.8	30	64.3**	42	66.1**	-1.8	110	37.9**	110	32.7**	5.2
Active Board Certification—Other Physician Specialists	249	67.8	247	69.2**	-1.4	30	80.6**	42	82.6**	-2.0	110	67.2	110	66.1**	1.0

Measure	DUAL SNPS					INSTITUTIONAL SNPS					CHRONIC SNPS				
	2016		2015		2016 vs 2015	2016		2015		2016 vs 2015	2016		2015		2016 vs 2015
	#	Rate	#	Rate	Change	#	Rate	#	Rate	Change	#	Rate	#	Rate	Change
Potentially Harmful Drug-Disease Interactions—History of Falls*	265	54.5	264	54.2	-0.3	30	62.5**	42	64.4**	1.9	111	54.6	112	54.9	0.3
Potentially Harmful Drug-Disease Interactions—Dementia*	265	59.9**	264	61.1	1.2	30	51.6	42	58.5	6.9**	111	50.8	112	54.9	4.1**
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*	265	18.8**	264	19.1**	0.3	30	7.8	42	7.5	-0.3	111	12.7	112	12.8	0.1
Potentially Harmful Drug-Disease Interactions—Total Rate*	265	49.6	264	50.4	0.8	30	49.0	42	54.4	5.4**	111	39.8**	112	41.4**	1.6
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication*	262	10.9	264	15.8	4.9**	30	9.5	42	14.1	4.6**	111	8.1	112	16.3	8.1**
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications*	262	1.6	264	2.8	1.2**	30	0.7	42	1.8	1.1**	111	0.8	112	2.4	1.6**
Plan All-Cause Readmissions (O/E Ratio ≥65*	262	0.92**	260	0.78**	-0.13**	29	0.65**	42	0.55**	-0.10**	110	0.87**	112	0.72**	-0.15**
Plan All-Cause Readmissions (O/E Ratio <65)*	262	0.90	264	0.82**	-0.08**	29	0.79	42	0.65**	-0.14	108	0.87	112	0.74**	-0.13**

*Lower values signify better performance.

**Denotes a statistically significant difference (p<0.05) between years when rates are compared.

Shaded cells that contain “NA” (Not Applicable) represent a trend break where year-to-year comparison is not possible.

SNP Program Performance by Enrollment Size (Table 6)

This table displays program-wide performance for all SNPs by enrollment. Statistically significant changes are displayed by enrollment size categories and denote a change from HEDIS 2015–2016 within a specific enrollment category. Because statistical significance is a function of effect size and number of observations, NCQA did not test for statistical significance of the differences among SNP sizes because of the wide variation in SNP enrollment sizes. Should such testing be performed, the mean of the larger SNPs would dominate the mean of the sizes against which comparisons are made. It should be noted that as enrollment size increases, it is more likely that statistically significant differences will be found for progressively smaller effect sizes that may not be clinically significant.

Plan program performance by enrollment size (Table 6). This table displays program-wide performance for all SNPs by enrollment. The <99 enrollment category had the least amount of plans (34 in 2016) and the ≥2,500 category had the most plans (146 plans in 2016). Both *Use of High-Risk Medications in the Elderly* measures had significant increases across plans with greater than 100 enrollees.

<99 Enrollment

- Statistically significant increases in one measure: *Potentially Harmful Drug-Disease Interactions—Dementia* (24.8 percentage points).
- Statistically significant decreases in FOUR measures (*Care for Older Adults—Advance Care Planning*, *Care for Older Adults—Medication Review*, *Active Board Certification—Family Medicine*, and *Active Board Certification – Other Physician Specialists*). All measures had significant decrease of more than 10 percentage points.

100–499 Enrollment

- Statistically significant increases in four measures - both *Use of High-Risk Medications in the Elderly* measures, *Active Board Certification—Internal Medicine*, and *Active Board Certification—Geriatrics*.
- Statistically significant decreases in five measures: *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge*, *Care for Older Adults—Medication Review*, *Care for Older Adults—Pain Screening*, *Plan All Cause Readmissions O/E<65*, and *Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*.

500–999 Enrollment

- Statistically significant increases in four measures: *Potentially Harmful Drug-Disease Interactions—Dementia*, *Potentially Harmful Drug-Disease Interactions—Total Rate*, and both *Use of High-Risk Medications in the Elderly* measures.
- Statistically significant decreases in one measure: *Plan All Cause Readmissions O/E ≥65*.

1,000–2,499 Enrollment

- Statistically significant increases in four measures: *Potentially Harmful Drug-Disease Interactions-Dementia*, *Potentially Harmful Drug-Disease Interactions-Total Rate*, and both *Use of High-Risk Medications in the Elderly* measures.
- Statistically significant decreases in two measures: both *Plan All-Cause Readmissions* measures.

≥2,500 Enrollment

- Statistically significant increases in 10 measures: *Colorectal Cancer Screening, Osteoporosis Management in Women Who Had a Fracture, Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring, Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring, Annual Monitoring for Patients on Persistent Medications—Total Rate, Care for Older Adults—Advance Care Planning, Care for Older Adults—Functional Status Assessment, Care for Older Adults—Pain Screening* and both *Use of High-Risk Medications in the Elderly* measures.
- Statistically significant decreases in three measures: *both Plan All-Cause Readmissions* measures and *Active Board Certification – Geriatric*s.

Table 6. SNP Overall Program Performance by Enrollment Size, HEDIS 2015 and 2016

RATE BY SNP ENROLLMENT SIZE															
	<99			100–499			500–999			1,000–2,499			**≥2,500**		
Measure	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change
Total SNPs	34	25		86	101		53	64		87	85		146	145	
Colorectal Cancer Screening	59.0	58.6	0.4	68.8	69.9	-1.1	69.9	70.4	-0.5	69.0	70.3	-1.3	72.9	68.7	4.2**
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	37.5	0.0	37.5	31.8	32.1	-0.3	37.8	38.9	-1.1	34.7	36.7	-2.0	35.4	33.7	1.7
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	55.4	62.5	-7.1	69.9	73.6	-3.7	69.9	72.1	-2.2	68.8	70.1	-1.3	68.3	67.5	0.8
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	72.8	82.1	-9.3	81.6	84.5	-2.8	80.6	83.2	-2.7	82.1	83.0	-1.0	80.8	81.2	-0.4
Controlling High Blood Pressure	57.9	63.5	-5.6	63.5	66.4	-2.9	64.6	65.7	-1.1	60.6	62.7	-2.1	60.0	61.7	-1.7
Persistence of Beta-Blocker Treatment After a Heart Attack	80.0	100.0	-20.0	93.5	92.9	0.6	91.8	89.7	2.0	89.8	90.7	-0.9	89.9	89.7	0.2
Osteoporosis Management in Women Who Had a Fracture	0.0	0.0	0.0	48.4	41.4	6	45.3	42.4	2.9	36.9	40.6	-3.7	48.4	37.0	11.4**
Antidepressant Medication Management—Acute Phase	73.8	67.6	6.2	71.2	70.6	0.6	70.0	68.0	2.1	66.9	65.6	1.2	62.5	60.5	2.0
Antidepressant Medication Management—Continuation Phase	66.7	56.8	9.9	56.8	55.7	1.1	55.1	52.0	3.2	52.4	50.3	2.0	46.8	45.2	1.6
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	28.9	38.4	-9.4	41.3	45.0	-3.7	41.9	45.3	-3.4	45.4	45.8	-0.3	52.7	56.0	-3.3

RATE BY SNP ENROLLMENT SIZE															
	<99			100–499			500–999			1,000–2,499			≥2,500		
Measure	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	13.2	23.3	-10.1	19.1	27.1	-8.0**	24.5	26.1	-1.6	28.0	27.9	0.1	35.0	36.5	-1.5
Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring	89.6	94.2	-4.6	95.0	95.9	-1.0	95.4	94.2	1.3	95.0	95.3	-0.3	95.0	94.3	0.7**
Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring	61.1	76.2	-15.1	64.5	60.6	3.9	58.6	53.5	5.1	67.4	64.9	2.5	53.6	53.7	-0.1
Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring	94.0	93.4	0.7	95.7	96.0	-0.3	95.6	94.7	0.9	95.2	95.6	-0.4	95.3	94.5	0.7**
Annual Monitoring for Patients on Persistent Medications—Total Rate	91.1	93.5	-2.4	94.7	95.3	-0.5	94.9	93.6	1.3	94.6	94.7	-0.1	94.5	93.7	0.8**
Medication Reconciliation Post-Discharge	16.5	NA	NA	19.9	NA	NA	15.1	NA	NA	20.1	NA	NA	23.1	NA	NA
Care for Older Adults—Advance Care Planning	32.8	65.0	-32.2**	58.7	64.6	-5.9	54.1	59.9	-5.8	62.8	70.0	-7.3	65.8	59.6	6.2**
Care for Older Adults—Medication Review	65.0	80.9	-15.9**	87.5	91.9	-4.5**	89.2	88.3	0.9	90.1	91.5	-1.4	89.5	88.1	1.4
Care for Older Adults—Functional Status Assessment	61.6	74.7	-13.1	83.7	87.5	-3.8	88.2	83.1	5.1	85.1	86.7	-1.6	82.9	77.5	5.3**
Care for Older Adults—Pain Screening	66.7	78.5	-11.8	90.0	94.2	-4.3**	93.3	90.6	2.6	92.1	92.7	-0.6	90.9	87.9	3.0**
Potentially Harmful Drug-Disease Interactions—History of Falls*	64.5	64.3	-0.2	60.2	59.7	-0.5	54.8	54.7	-0.1	58.0	60.1	2.1	54.3	53.8	-0.5

RATE BY SNP ENROLLMENT SIZE															
	<99			100–499			500–999			1,000–2,499			**≥2,500**		
Measure	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change	2016 Rate	2015 Rate	2016 vs 2015 Change
Potentially Harmful Drug-Disease Interactions—Dementia*	65.2	90.0	24.8**	54.7	56.8	2.2	53.0	57.7	4.7**	53.6	60.9	7.3**	58.7	60.0	1.4
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*	4.8	0.0	-4.8	17.3	12.4	-4.9**	13.2	14.7	1.5	12.8	14.9	2.1	17.4	17.7	0.3
Potentially Harmful Drug-Disease Interactions—Total Rate*	52.0	71.4	19.4	47.5	48.6	1.1	43.5	46.9	3.4**	46.2	52.4	6.2**	47.9	48.7	0.8
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication*	16.2	16.7	0.6	12.0	15.4	3.4**	11.3	14.7	3.4**	10.4	13.6	3.2**	10.2	16.1	5.9**
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications*	3.1	2.9	-0.2	1.6	2.5	0.9**	1.4	2.2	0.8**	1.3	2.0	0.7**	1.4	2.8	1.4**
Active Board Certification—Family Medicine	60.8	74.2	-13.4**	57.3	55.1	2.2	54.7	57.0	2.4	58.9	60.5	-1.6	62.5	66.7	-4.2
Active Board Certification—Internal Medicine	72.9	77.5	-4.6	68.7	63.3	5.4**	66.1	63.9	2.2	69.2	70.6	-1.5	72.4	73.6	-1.2
Active Board Certification—Geriatrics	47.8	65.9	-18.1**	47.3	31.7	15.6**	40.2	34.6	5.6	43.6	47.1	-3.5	58.4	65.0	-6.6**
Active Board Certification—Other Physician Specialists	66.2	80.5	14.2	65.5	64.0	1.5	66.1	65.6	0.5	69.9	71.8	-2.0	75.2	76.6	-1.4
Plan All-Cause Readmissions (O/E Ratio ≥65)*	1.44	0.82	-0.62	0.82	0.73	-0.09	0.86	0.72	-0.15**	0.82	0.68	-0.14**	0.91	0.78	-0.13**
Plan All-Cause Readmissions (O/E Ratio <65)*	1.15	0.85	-0.30	0.89	0.72	-0.18**	0.84	0.77	-0.08	0.84	0.71	-0.13**	0.90	0.81	-0.08**

*Lower values signify better performance.

**Denotes the rate for that plan size is statistically different (p <0.05) from 2015–2016.

Shaded cells that contain "NA" (Not Applicable) represent a trend break where year-to-year comparison is not possible.

SNP Benefit Package Performance (Table 7)

This section focuses on individual SNP benefit package performance ("plan benefit packages" [PBP]) and how performance on each measure is distributed. Distribution is based on the performance of SNPs with at least 30 enrollees in the denominator of the measure. This is the minimum denominator size NCQA has for reporting individual HEDIS rates.

Table 7 includes the mean, the standard deviation, the performance distribution (10th–90th percentiles) and the minimum and maximum HEDIS scores for SNPs that met the minimum denominator size. The number of SNPs able to report each measure ranged from 398 for *Annual Monitoring for Patients on Persistent Medications—Total Rate,* to 70 for *Persistence of Beta-Blocker Treatment After a Heart Attack.*

Data show a wide distribution of performance within each measure. The average difference between the 10th and 90th percentile is 26 percentage points, which is relatively the same as the average difference in 2015 (an increase of 0.2 percentage points). The average difference has stayed relatively the same between 2014 and 2016 (an increase of 2.2 percentage points). The standard deviation ranges from 2.1 percentage points *(Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications)* to 28.3 percentage points *(Care for Older Adults—Advance Care Planning)*, demonstrating that the spread around the mean score varies substantially, depending on the measure.

The smallest gaps (less than 10 percentage points) between the 10th and 90th percentiles were found for the following measures:

- *Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications*
  (3.6 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring* (8.4 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring* (8.7 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Total Rate* (9.2 percentage points).

Nine measures had large percentage point differences (40 points or more) between SNPs scoring in the 10th percentile and those in the 90th percentile:

- *Care for Older Adults—Advance Care Planning* (78.2 percentage points).
- *Osteoporosis Management in Women Who Had a Fracture* (64.6 percentage points).
- *Care for Older Adults—Functional Status Assessment* (53.8 percentage points).
- *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge* (50.7 percentage points).
- *Use of Spirometry Testing in the Assessment and Diagnosis of COPD* (47.5 percentage points).
- *Medication Reconciliation Post-Discharge* (45.2 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring* (43.8 percentage points).
- *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge* (42.4 percentage points).

- *Controlling High Blood Pressure* (42.4 percentage points).

Eleven measures showed a large difference (at least 18 percentage points) between the 90th percentile and the mean score, and thus present the greatest areas for overall improvement.

- *Care for Older Adults—Advance Care Planning* (36.4 percentage points).
- *Osteoporosis Management in Women Who Had a Fracture* (33.3 percentage points).
- *Use of Spirometry Testing in the Assessment and Diagnosis of COPD* (29.9 percentage points).
- *Active Board Certification—Geriatrics* (29.4 percentage points).
- *Medication Reconciliation Post-Discharge* (28.0 percentage points).
- *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge* (25.7 percentage points).
- *Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring* (23.9 percentage points).
- *Active Board Certification—Family Medicine* (23.9 percentage points).
- *Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge* (23.8 percentage points).
- *Controlling High Blood Pressure* (19.3 percentage points).
- *Care for Older Adults—Functional Status Assessment* (18.0 percentage points).

Since the results of the *Plan All-Cause Readmissions* measure are observed to expected ratios (O/E) compared to rates for the other HEDIS measures, we could not consider them for the analysis above.

Table 7. SNP Benefit Package Performance, HEDIS 2016

Measures	Total SNPs	Mean	Std. Dev.	PERCENTILE DISTRIBUTION OF PERFORMANCE						
				Min	P10	P25	P50	P75	P90	Max
Colorectal Cancer Screening	327	68.9	12.4	25.0	53.5	60.4	69.3	78.2	84.2	93.7
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	170	37.9	17.3	0.0	20.3	27.1	34.3	44.9	67.8	79.5
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	193	70.1	10.9	12.8	61.1	66.3	71.6	76.5	80.2	91.9
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	193	82.7	10.2	24.3	67.5	79.5	84.8	89.2	92.0	100.0
Controlling High Blood Pressure	349	62.0	16.3	21.2	38.9	51.6	64.4	73.8	81.3	100.0
Persistence of Beta-Blocker Treatment After a Heart Attack	70	90.7	5.9	71.9	84.0	86.5	90.8	94.7	100.0	100.0
Osteoporosis Management in Women Who Had a Fracture	79	47.3	22.5	5.9	16.0	29.4	47.1	64.3	80.6	91.2
Antidepressant Medication Management—Acute Phase	233	65.2	10.0	35.1	53.1	58.3	65.1	71.9	78.9	96.9
Antidepressant Medication Management—Continuation Phase	233	50.1	11.4	23.7	36.5	42.2	49.1	56.6	64.4	92.8
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	150	48.6	18.2	6.1	23.6	35.7	48.9	62.4	74.3	87.1
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	150	31.1	16.1	4.0	12.5	18.5	27.7	41.7	54.9	81.3
Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring	373	94.6	4.0	69.8	90.2	92.9	95.1	97.4	98.9	100.0
Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring	133	58.8	15.8	29.0	38.9	49.1	57.1	65.9	82.7	100.0
Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring	362	95.2	3.9	70.2	90.8	93.7	95.9	97.7	99.2	100.0
Annual Monitoring for Patients on Persistent Medications—Total Rate	398	94.1	4.4	59.0	89.5	92.5	94.6	96.8	98.7	100.0
Medication Reconciliation Post-Discharge	351	21.2	19.8	0.0	4.0	7.8	14.6	25.2	49.2	94.2
Care for Older Adults—Advance Care Planning	388	57.8	28.3	0.0	16.0	36.4	61.8	82.2	94.2	100.0

Measures	Total SNPs	Mean	Std. Dev.	PERCENTILE DISTRIBUTION OF PERFORMANCE						
				Min	P10	P25	P50	P75	P90	Max
Care for Older Adults—Medication Review	388	86.5	15.9	3.1	65.3	83.2	91.8	96.7	99.0	100.0
Care for Older Adults—Functional Status Assessment	388	80.6	21.4	0.0	44.8	71.3	90.4	96.3	98.6	100.0
Care for Older Adults—Pain Screening	388	88.3	15.6	0.0	67.4	85.1	94.6	98.1	99.3	100.0
Potentially Harmful Drug-Disease Interactions—History of Falls*	214	55.1	9.6	79.5	66.3	61.5	55.6	48.9	43.2	26.4
Potentially Harmful Drug-Disease Interactions—Dementia*	223	54.5	9.8	88.6	67.1	59.3	53.8	48.6	44.0	28.8
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*	187	14.8	8.4	45.9	25.5	18.9	13.9	9.4	5.8	0.0
Potentially Harmful Drug-Disease Interactions—Total Rate*	288	45.7	8.9	88.0	57.2	51.1	45.5	39.7	34.5	19.5
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication*	384	11.7	6.5	37.8	20.3	14.3	10.0	7.3	5.2	2.0
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications*	384	1.7	2.1	21.9	3.8	2.1	1.0	0.5	0.2	0.0
Active Board Certification—Family Medicine	389	65.1	19.8	1.6	45.9	49.9	68.9	80.7	89.0	100.0
Active Board Certification—Internal Medicine	389	71.0	14.6	11.0	55.2	61.7	74.1	79.9	88.3	100.0
Active Board Certification—Geriatrics	388	59.5	24.1	0.0	19.3	50.0	63.9	75.0	88.9	100.0
Active Board Certification—Other Physician Specialists	389	73.6	16.1	18.4	55.0	62.0	80.4	84.5	90.0	100.0
Plan All-Cause Readmissions (O/E Ratio ≥65)*	385	0.90	0.96	14.79	1.17	1.00	0.85	0.67	0.39	0.00
Plan All-Cause Readmissions (O/E Ratio <65)*	352	0.78	0.48	4.57	1.17	0.98	0.83	0.58	0.00	0.00

*Lower values signify better performance.

SNP Benefit Package Performance Changes, HEDIS 2014–2016 (Table 8)

Table 8 analyzes performance by benefit package, showing the percentage of benefit packages that improved or decreased performance from 2014–2016 and from 2015–2016. As in Table 7, results are shown from SNPs that met the minimum sample size of 30 or more. Comparisons between 2014 and 2016 were based on plans with submissions in all three years; comparisons between 2015 and 2016 were based on plans with submissions in those years.

Of the 32 measures where a comparison can be made, more than 50% of SNPs showed improvement on 23 measures from 2015-2016. Conversely, there were eight measures where more than 50% of SNPs showed decreased performance from 2015–2016.

Table 8. SNP Benefit Package Performance Changes, HEDIS 2014–2016

Shaded cells that contain "NA" (Not Applicable) represent a trend break where year-to-year comparison is not possible.

Measures	Percentage of SNPs With Changes in Performance 2014–2016*		Percentage of SNPs With Changes in Performance 2015–2016**	
	Improved Performance	Decreased Performance	Improved Performance	Decreased Performance
Colorectal Cancer Screening	72.2	27.8	66.0	34.0
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	57.9	42.1	57.0	43.0
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	54.9	45.1	60.8	38.6
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	51.3	48.7	47.7	52.3
Controlling High Blood Pressure	NA	NA	51.0	49.0
Persistence of Beta-Blocker Treatment After a Heart Attack	53.5	46.5	46.6	51.7
Osteoporosis Management in Women Who Had a Fracture	85.7	14.3	67.2	32.8
Antidepressant Medication Management—Acute Phase	68.9	31.1	57.6	42.4
Antidepressant Medication Management—Continuation Phase	64.0	36.0	59.2	40.3
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	48.4	51.6	46.4	52.8
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	53.8	46.2	49.6	50.4
Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring	NA	NA	63.0	36.4
Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring	NA	NA	53.3	46.7
Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring	NA	NA	63.7	35.4

Measures	Percentage of SNPs With Changes in Performance 2014–2016*		Percentage of SNPs With Changes in Performance 2015–2016**	
	Improved Performance	Decreased Performance	Improved Performance	Decreased Performance
Annual Monitoring for Patients on Persistent Medications—Total Rate	NA	NA	67.0	32.7
Medication Reconciliation Post-Discharge	NA	NA	NA	NA
Care for Older Adults—Advance Care Planning	76.0	22.7	59.7	39.7
Care for Older Adults—Medication Review	66.3	32.9	56.9	41.2
Care for Older Adults—Functional Status Assessment	79.0	18.5	65.8	32.6
Care for Older Adults—Pain Screening	74.9	23.0	63.7	34.2
Potentially Harmful Drug-Disease Interactions—History of Falls*	50.3	49.7	50.5	48.9
Potentially Harmful Drug-Disease Interactions—Dementia*	72.9	27.1	72.9	26.6
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure*	52.8	46.5	52.9	47.1
Potentially Harmful Drug-Disease Interactions—Total Rate*	66.7	33.3	63.3	36.7
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication*	96.3	3.8	88.2	11.8
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications*	92.9	6.7	81.4	16.8
Active Board Certification—Family Medicine	32.9	65.4	35.0	61.3
Active Board Certification—Internal Medicine	38.5	61.0	50.3	44.4
Active Board Certification—Geriatrics	40.1	54.5	42.0	49.4
Active Board Certification—Other Physician Specialists	58.0	42.0	57.2	40.0
Plan All-Cause Readmissions (O/E Ratio ≥65)	NA	NA	24.7	75.3
Plan All-Cause Readmissions (O/E Ratio <65)	NA	NA	32.5	67.5

* Includes only SNPs that reported rates in all three years, 2014–2016.
** Includes only SNPs that reported rates in 2015 and 2016.

Note: The sum of SNPs with Improved Performance and Decreased Performance does not always equal 100%, because there are SNPs that had no change in performance.

SNP HEDIS Data Submissions by Measure (Tables 9a and 9b)

Tables 9a and 9b show the number of SNPs reporting each HEDIS measure and categorize reasons for some SNPs being unable to report valid rates for certain measures. A total of 406 SNPs submitted HEDIS measure results. Four hundred and five (405) SNPs were required to submit HEDIS measure results and CMS received one additional submission from a SNP that was not required to report.

For HEDIS 2016, NCQA changed the audit requirement for the Board Certification measure. The change was that the measures and its indicators only needed to be audited once every three years. This meant that if an organization's results were audited for HEDIS 2015, they were not required to have these data audited again until HEDIS 2018. So for HEDIS 2016, plans were not required to have this measures audited if they had it audited in the prior year. However, an organization could choose to have their measure rates audited, and that's why 139 submissions have an audit designation other than unaudited. For the 311 unaudited rates, the plan reported rates that were not audited.

NCQA Certified HEDIS Auditors categorized each measure as follows.

- Did Report Categories (Table 9a):
  - Denominator ≥30 is designated as a Reportable Rate for individual plans.
  - Denominator <30 receives a Not Applicable (NA) audit designation, denoting SNPs with fewer than 30 enrollees in the denominator for the measure. These rates are not considered individually reportable.
- Did Not Report Categories (Table 9b):
  - Materially Biased is a determination made by NCQA Certified HEDIS Auditors. HEDIS measure rates generally have a 95% confidence interval. If auditors determine that a measure's rate is likely to be biased by more than ±5 percentage points because of data errors, the auditors designate the rate as materially biased. There were 86 instances, 72 coming from Active Board Certification measures, when a SNP did not report a given measure because it was found to be materially biased.
  - Chose Not to Report indicates that the SNP chose not to report a specific measure. There were 75 instances where SNPs chose not to report a measure.

Table 9a reports the number of submissions by measure; Table 9b reports the rationale for SNPs not having reportable measure results.

As mentioned above, measure results must have denominators ≥30 to be considered reliable for individual SNP reporting. NCQA used measure results with denominators ≥30 for the SNP PBP-level performance analysis which is contained in Table 7. Measure results based on denominators <30 were not used in this analysis.

There were 18 measures for which more than 80% of the SNPs had a sufficient population (denominator of at least 30 enrollees) to allow for individual SNP-level reporting. *Annual Monitoring for Patients on Persistent Medications—Total Rate* had the largest number (398 SNPs, or 98%) of SNPs with a sufficient population, followed by the four *Care for Older Adults* measures (388 SNPs, or 95.6%).

SNPs were more likely to have denominators <30 for measures that address a new condition or incident (e.g., hospitalized and discharged with a heart attack during a defined period) or less prevalent conditions, because there are fewer patient encounters or actions to meet the numerator

requirement. *Persistence of Beta-Blocker Treatment After a Heart Attack* had the smallest number of SNPs with denominators ≥*30* (70 SNPs, or 17.2%). *Osteoporosis Management in Women Who Had a Fracture* also had a small number of SNPs with denominators ≥*30* (79 SNPs, or 19.5%).

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Table 9a. SNP HEDIS 2016 Data Submission—Did Report

Measures	Total Submissions		Denominator ≥30		Denominator <30	
	N	%	N	%	N	%
Colorectal Cancer Screening	406	100.0	327	80.5	79	19.5
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	406	100.0	170	41.9	236	58.1
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	393	96.8	193	47.5	200	49.3
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	393	96.8	193	47.5	200	49.3
Controlling High Blood Pressure	402	99.0	349	86.0	53	13.1
Persistence of Beta-Blocker Treatment After a Heart Attack	406	100.0	70	17.2	336	82.8
Osteoporosis Management in Women Who Had a Fracture	406	100.0	79	19.5	327	80.5
Antidepressant Medication Management—Acute Phase	406	100.0	233	57.4	173	42.6
Antidepressant Medication Management—Continuation Phase	406	100.0	233	57.4	173	42.6
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	403	99.3	150	36.9	253	62.3
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	403	99.3	150	36.9	253	62.3
Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring	406	100.0	373	91.9	33	8.1
Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring	406	100.0	133	32.8	273	67.2
Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring	406	100.0	362	89.2	44	10.8
Annual Monitoring for Patients on Persistent Medications—Total Rate	406	100.0	398	98.0	8	2.0
Medication Reconciliation Post-Discharge	404	99.5	351	86.5	53	13.1
Care for Older Adults—Advance Care Planning	406	100.0	388	95.6	18	4.4
Care for Older Adults—Medication Review	406	100.0	388	95.6	18	4.4
Care for Older Adults—Functional Status Assessment	406	100.0	388	95.6	18	4.4
Care for Older Adults—Pain Screening	406	100.0	388	95.6	18	4.4
Potentially Harmful Drug-Disease Interactions—History of Falls	406	100.0	214	52.7	192	47.3
Potentially Harmful Drug-Disease Interactions—Dementia	406	100.0	223	54.9	183	45.1

Measures	Total Submissions		Denominator ≥30		Denominator <30	
	N	%	N	%	N	%
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure	406	100.0	187	46.1	219	53.9
Potentially Harmful Drug-Disease Interactions—Total Rate	406	100.0	288	70.9	118	29.1
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication	403	99.3	384	94.6	19	4.7
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications	403	99.3	384	94.6	19	4.7
Active Board Certification—Family Medicine	390	96.1	390	96.1	0	0.0
Active Board Certification—Internal Medicine	390	96.1	390	96.1	0	0.0
Active Board Certification—Geriatrics	390	96.1	389	95.8	1	0.2
Active Board Certification—Other Physician Specialists	390	96.1	390	96.1	0	0.0
Plan All-Cause Readmissions (O/E Ratio ≥65)	401	98.8	385	94.8	16	3.9
Plan All-Cause Readmissions (O/E Ratio <65)	399	98.3	352	86.7	47	11.6

Table 9b. SNP HEDIS 2016 Data Submission—Did Not Report

Measures	DID NOT REPORT CATEGORIES									
	Materially Biased		Chose Not to Report		Benefit Not Offered		Out of Scope		Not Required	
	N	%	N	%	N	%	N	%	N	%
Colorectal Cancer Screening	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pharmacotherapy of COPD Exacerbation—Dispensed Systemic Corticosteroid Within 14 Days of Event	13	3.2	0	0.0	0	0.0	0	0.0	0	0.0
Pharmacotherapy of COPD Exacerbation—Dispensed Bronchodilator Within 30 Days of Event	13	3.2	0	0.0	0	0.0	0	0.0	0	0.0
Controlling High Blood Pressure	4	1.0	0	0.0	0	0.0	0	0.0	0	0.0
Persistence of Beta-Blocker Treatment After a Heart Attack	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Osteoporosis Management in Women Who Had a Fracture	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Antidepressant Medication Management—Acute Phase	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Antidepressant Medication Management—Continuation Phase	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 30 Days of Discharge	0	0.0	0	0.0	2	0.5	0	0.0	1	0.2
Follow-Up After Hospitalization for Mental Illness—Follow-Up Within 7 Days of Discharge	0	0.0	0	0.0	2	0.5	0	0.0	1	0.2
Annual Monitoring for Patients on Persistent Medications—ACE/ARB Monitoring	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Annual Monitoring for Patients on Persistent Medications—Digoxin Monitoring	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Annual Monitoring for Patients on Persistent Medications—Diuretic Monitoring	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Annual Monitoring for Patients on Persistent Medications—Total Rate	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Medication Reconciliation Post-Discharge	2	0.5	0	0.0	0	0.0	0	0.0	0	0.0

Measures	DID NOT REPORT CATEGORIES									
	Materially Biased		Chose Not to Report		Benefit Not Offered		Out of Scope		Not Required	
	N	%	N	%	N	%	N	%	N	%
Care for Older Adults—Advance Care Planning	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Care for Older Adults—Medication Review	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Care for Older Adults—Functional Status Assessment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Care for Older Adults—Pain Screening	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Potentially Harmful Drug-Disease Interactions—History of Falls	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Potentially Harmful Drug-Disease Interactions—Dementia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Potentially Harmful Drug-Disease Interactions—Chronic Renal Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Potentially Harmful Drug-Disease Interactions—Total Rate	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Use of High-Risk Medications in the Elderly—At Least One High-Risk Medication	3	0.7	0	0.0	0	0.0	0	0.0	0	0.0
Use of High-Risk Medications in the Elderly—At Least Two Different High-Risk Medications	3	0.7	0	0.0	0	0.0	0	0.0	0	0.0
Active Board Certification—Family Medicine	16	3.9	0	0.0	0	0.0	0	0	0	0.0
Active Board Certification—Internal Medicine	16	3.9	0	0.0	0	0.0	0	0	0	0.0
Active Board Certification—Geriatrics	16	3.9	0	0.0	0	0.0	0	0	0	0.0
Active Board Certification—Other Physician Specialists	16	3.9	0	0.0	0	0.0	0	0	0	0.0
Plan All-Cause Readmissions (O/E Ratio ≥65)	3	0.7	2	0.5	0	0.0	0	0.0	0	0.0
Plan All-Cause Readmissions (O/E Ratio <65)	3	0.7	4	1.0	0	0.0	0	0.0	0	0.0

Data Limitations

Analysis provides information about how well SNPs performed in key quality areas described in the body of this report. Important to note is that there are limited results from small plans, which affects analysis. As of February 2015, there were 548 SNPs participating in the program with 405 of these SNPs required to report HEDIS 2016 results by CMS. NCQA also received 1 submission from a SNP that had fewer than 30 beneficiaries and was not required to report because of their small enrollment. To provide a complete picture of the SNP environment, analyses systematically distinguished aggregate program performance from benefit package performance. Program-level analysis includes data from all SNP submissions, regardless of size, to generate a complete picture of the SNP program.

HEDIS reporting guidelines also have a size limitation: they require a minimum denominator of 30 for each measure. With a smaller number, the reliability and stability of rates for individual plans are below statistically acceptable levels. Some SNPs did not have 30 enrollees for any individual measure, although they had more than 30 enrollees overall; therefore, NCQA could not include those SNPs in the analysis that compares results of individual SNPs (benefit package performance). NCQA includes results by measure of all SNPs in the overall program performance, regardless of size.

There are trend breaks for some measures in the report, the result of year-to-year changes in the specifications for reportable measures. Trend breaks also result from the introduction of new measures during the three-year analysis period or from measures that were no longer required, resulting in no trendable data for those measures during the review period.

HEDIS Exclusions for Nonacute Admissions

For clinical appropriate reasons, there are exclusions in specific HEDIS measures for enrollees admitted to nonacute inpatient facilities. Therefore, I-SNPs, which should have a higher percentage of its membership in facilities, will have more members excluded from specific measures compared to other types of plans. Two measures have optional exclusions; two have non-optional exclusions for enrollees who are admitted to nonacute inpatient facilities. These exclusions apply to all SNP types and also apply to other MA plans, commercial and Medicaid plans.

- *Controlling High Blood Pressure.* Optional exclusion of enrollees who had admission to a nonacute inpatient setting.
- *Persistence of Beta-Blocker Treatment.* Exclude enrollees who were hospitalized for AMI but transferred directly to nonacute care facilities for any diagnosis.
- *Follow-Up After Hospitalization for Mental Illness.* Exclude enrollees who are discharged to nonacute care facilities after being hospitalized for mental illness.
- *Annual Monitoring for Patients on Persistent Medications.* Optional exclusion of enrollees who had acute or nonacute inpatient stays.

All submissions were reviewed by HEDIS Compliance Auditors, even if the outcome was that there were no enrollees in the measure denominator after the exclusion. Results for I-SNPs indicate that there were enrollees living in the community (I-SNP enrollees must be at risk for institutionalization, but not necessarily institutionalized) or that some SNPs chose not to implement the optional exclusions.

Appendix A: HEDIS Background

About HEDIS

HEDIS is a comprehensive set of standardized performance measures designed to provide purchasers and consumers with the information they need for reliable comparison of health plan performance. The HEDIS measurement set is sponsored, supported and maintained by NCQA. Measures relate to many significant public health issues, such as cancer, heart disease, smoking, asthma and diabetes. NCQA-Certified HEDIS Compliance Auditors verify all results using a process designed by NCQA. SNPs can use HEDIS performance data to identify opportunities for improvement, monitor the success of quality improvement initiatives, track improvement and provide a set of measurement standards that allow comparison with other plans. Data allow identification of performance gaps and establishment of realistic targets for improvement.

The development of a HEDIS measure involves multiple steps; each potential measure is refined and evaluated at several points in the process. NCQA's Committee on Performance Measurement (CPM) oversees the evolution of the measurement set and includes representation by purchasers, consumers, health plans, health care providers and policy makers. Measurement Advisory Panels (MAP) provide the clinical and technical knowledge required to develop the measures. Additional HEDIS Expert Panels and the Technical Measurement Advisory Panel (TMAP) provide invaluable assistance by identifying methodological issues and giving feedback on new and existing measures.

Measure Selection

With guidance from the Geriatric MAP, NCQA recommended to CMS a subset of HEDIS measures to be reported by SNPs. Starting with measures reported by MA plans at the contract level, the subset was then defined by one of the following qualities:

1. An upper age limit above 75 years of age, because measures with an upper age limit below 75 would exclude many SNP beneficiaries, ***or***
2. Measures focus on overall health management rather than on one disease or condition, and are therefore appropriate for a population with multiple comorbid conditions.

SNPs reported the following measures in HEDIS 2016:

- *Colorectal Cancer Screening.*
- *Care for Older Adults.*
- *Use of Spirometry Testing in the Assessment and Diagnosis of COPD.*
- *Pharmacotherapy of COPD Exacerbation.*
- *Controlling High Blood Pressure.*
- *Persistence of Beta-Blocker Treatment After a Heart Attack.*
- *Annual Monitoring for Patients on Persistent Medications.*
- *Medication Reconciliation Post-Discharge.*
- *Potentially Harmful Drug-Disease Interactions in the Elderly*.*
- *Use of High-Risk Medications in the Elderly*.*
- *Osteoporosis Management in Women Who Had a Fracture.*
- *Antidepressant Medication Management.*

- *Follow-Up After Hospitalization for Mental Illness.*
- *Board Certification.*
- *Plan All-Cause Readmission*.*

*Lower rate indicates better performance.

Appendix B contains the technical specifications for these measures.

Note: *HEDIS 2016 results are reported in 2016 and primarily cover services delivered in 2015.*

Data Collection and Validation Process

To submit HEDIS measures, SNPs used NCQA's Web-based Interactive Data Submission System, which has extensive data validation checks. Before the submission process, NCQA collected SNP benefit package profile data to determine reporting eligibility. HEDIS measures were reported by SNPs with an enrollment of ≥30 enrollees as of the CMS February 2015 SNP Comprehensive Report, which has enrollment figures for mid-January 2015.

Before data were submitted to NCQA, every SNP benefit package submission underwent a HEDIS Compliance Audit™. The NCQA HEDIS Compliance Audit is a two-part program that consists of an overall assessment of information systems capabilities (IS standards), followed by an evaluation of a plan's ability to comply with HEDIS specifications (HD standards). NCQA-Certified Auditors reviewed systems, policies and procedures, and final data results, ensuring that measures were correctly calculated and reported.

Appendix B: HEDIS 2016 Technical Specifications

This appendix contains the HEDIS 2016 technical specifications for the HEDIS measures SNPs were required to report.

Colorectal Cancer Screening (COL)

Summary of Changes to HEDIS 2016

- Clarified in the Hybrid Specification that FOBT tests performed in an office setting or performed on a sample collected via a digital rectal exam (DRE) do not meet criteria.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of members 50–75 years of age who had appropriate screening for colorectal cancer.

Eligible Population

Product lines	Commercial, Medicare (report each product line separately).
Ages	51–75 years as of December 31 of the measurement year.
Continuous enrollment	The measurement year and the year prior to the measurement year.
Allowable gap	No more than one gap in continuous enrollment of up to 45 days during each year of continuous enrollment.
Anchor date	December 31 of the measurement year.
Benefit	Medical.
Event/diagnosis	None.

Administrative Specification

Denominator The eligible population.

Numerator One or more screenings for colorectal cancer. Any of the following meet criteria:

- Fecal occult blood test (FOBT Value Set) during the measurement year. For administrative data, assume the required number of samples were returned, regardless of FOBT type.
- Flexible sigmoidoscopy (Flexible Sigmoidoscopy Value Set) during the measurement year or the four years prior to the measurement year.
- Colonoscopy (Colonoscopy Value Set) during the measurement year or the nine years prior to the measurement year.

Exclusion *(optional)*

Either of the following any time during the member's history through December 31 of the measurement year:

- Colorectal cancer (Colorectal Cancer Value Set).
- Total colectomy (Total Colectomy Value Set)

Hybrid Specification

Denominator A systematic sample drawn from the eligible population for each product line. Organizations may reduce the sample size using the current year's administrative rate or the prior year's audited, product line-specific rate. Refer to the *Guidelines for Calculations and Sampling* for information on reducing the sample size.

Numerator One or more screenings for colorectal cancer. Appropriate screenings are defined by one of the following:

- FOBT during the measurement year.
- Flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year.
- Colonoscopy during the measurement year or the nine years prior to the measurement year.

Administrative Refer to *Administrative Specification* to identify positive numerator hits from the administrative data.

Medical record Documentation in the medical record must include a note indicating the date when the colorectal cancer screening was performed. A result is not required if the documentation is clearly part of the "medical history" section of the record; if this is not clear, the result or finding must also be present (this ensures that the screening was performed and not merely ordered).

There are two types of FOBT tests: guaiac (gFOBT) and immunochemical (iFOBT). Depending on the type of FOBT test, a certain number of samples are required for numerator compliance. Follow the instructions below to determine member compliance.

- If the medical record does not indicate the type of test and there is no indication of how many samples were returned, assume the required number was returned. The member meets the screening criteria for inclusion in the numerator.
- If the medical record does not indicate the type of test and the number of returned samples is specified, the member meets the screening criteria only if the number of samples specified is greater than or equal to three samples. If there are fewer than three samples, the member does not meet the screening criteria for inclusion.

- iFOBT tests may require fewer than three samples. If the medical record indicates that an iFOBT was done, the member meets the screening criteria, regardless of how many samples were returned.
- If the medical record indicates that a gFOBT was done, follow the scenarios below.

– *If the medical record does not indicate the number of returned samples,* assume the required number was returned. The member meets the screening criteria for inclusion in the numerator.

– *If the medical record indicates that three or more samples were returned,* the member meets the screening criteria for inclusion in the numerator.

– *If the medical record indicates that fewer than three samples were returned,* the member does not meet the screening criteria.

Do not count digital rectal exams (DRE), FOBT tests performed in an office setting or performed on a sample collected via DRE.

Exclusion *(optional)*

Refer to *Administrative Specification* for exclusion criteria. Exclusionary evidence in the medical record must include a note indicating colorectal cancer or total colectomy any time during the member's history through December 31 of the measurement year.

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements. Cells with a dash (—) indicate data are not required.

Table COL-2/3: Data Elements for Colorectal Cancer Screening

	Administrative	Hybrid
Measurement year	Y	Y
Data collection methodology (Administrative or Hybrid)	Y	Y
Eligible population	Y	Y
Number of numerator events by administrative data in eligible population (before exclusions)	—	Y
Current year's administrative rate (before exclusions)	—	Y
Minimum required sample size (MRSS) or other sample size	—	Y
Oversampling rate	—	Y
Final sample size (FSS)	—	Y
Number of numerator events by administrative data in FSS	—	Y
Administrative rate on FSS	—	Y
Number of original sample records excluded because of valid data errors	—	Y

Number of administrative data records excluded	—	Y
Number of medical records excluded	—	Y
Number of employee/dependent medical records excluded	—	Y
Records added from the oversample list	—	Y
Denominator	—	Y
Numerator events by administrative data	Y	Y
Numerator events by medical records	—	Y
Numerator events by supplemental data	Y	Y
Reported rate	Y	Y
Lower 95% confidence interval	Y	Y
Upper 95% confidence interval	Y	Y

Care for Older Adults (COA)

Summary of Changes to HEDIS 2016

- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of adults 66 years and older who had each of the following during the measurement year:

- Advance care planning.
- Medication review.
- Functional status assessment.
- Pain assessment.

Definitions

Medication list	A list of the member's medications in the medical record. The medication list may include medication names only or may include medication names, dosages and frequency, over-the-counter (OTC) medications and herbal or supplemental therapies.
Medication review	A review of all a member's medications, including prescription medications, OTC medications and herbal or supplemental therapies.

Eligible Population

Product line	Medicare SNP.
Ages	66 years and older as of December 31 of the measurement year.
Continuous enrollment	The measurement year.
Allowable gap	No more than one gap in continuous enrollment of up to 45 days during the measurement year.
Anchor date	December 31 of the measurement year.
Benefit	Medical.
Event/diagnosis	None.

Administrative Specification

Denominator The eligible population.

Numerators

Advance Care Planning Evidence of advance care planning during the measurement year (Advance Care Planning Value Set).

Medication Review Any of the following meet criteria.

- Both of the following on the same date of service during the measurement year:
  - At least one medication review (Medication Review Value Set) conducted by a prescribing practitioner or clinical pharmacist.
  - The presence of a medication list in the medical record (Medication List Value Set).
- Transitional care management services (TCM 7 Day Value Set) where the reported date of service on the claim is on or between January 30 of the measurement year and January 22 of the year after the measurement year.
- Transitional care management services (TCM 14 Day Value Set) where the reported date of service on the claim is on or between January 30 of the measurement year and January 15 of the year after the measurement year.

Note: *Transitional care management is a 30-day period that begins on the date of discharge and continues for the next 29 days. The date of service on the claim is 29 days after discharge and not the date of the face-to-face visit. Medication management must be furnished no later than the date of the face-to-face visit.*

Functional Status Assessment At least one functional status assessment (Functional Status Assessment Value Set) during the measurement year.

Pain Assessment At least one pain assessment (Pain Assessment Value Set) during the measurement year.

Hybrid Specification

Denominator A systematic sample drawn from the eligible population. Organizations may reduce the sample size using the current year's administrative rate or the prior year's audited, product line-specific rate. Refer to the *Guidelines for Calculations and Sampling* for information on reducing the sample size.

Numerators

Advance Care Planning Evidence of advance care planning as documented through either administrative data or medical record review.

Administrative Refer to *Administrative Specification* to identify positive numerator hits from administrative data.

Medical record **Advance care planning** is a discussion about preferences for resuscitation, life-sustaining treatment and end of life care. Evidence of advance care planning must include one of the following:

- The presence of an advance care plan in the medical record.
- Documentation of an advance care planning **discussion** with the provider *and* the date when it was discussed. The documentation of discussion must be noted during the measurement year.
- Notation that the member previously executed an advance care plan.

Examples of an advance care plan

- **Advance directive.** Directive about treatment preferences and the designation of a surrogate who can make medical decisions for a patient who is unable to make them (e.g., living will, power of attorney, health care proxy).
- **Actionable medical orders.** Written instructions regarding initiating, continuing, withholding or withdrawing specific forms of life-sustaining treatment (e.g., Physician Orders for Life Sustaining Treatment [POLST], Five Wishes).
- **Living will.** Legal document denoting preferences for life-sustaining treatment and end-of-life care.
- **Surrogate decision maker.** A written document designating someone other than the member to make future medical treatment choices.

Examples of an advance care planning discussion

- Notation in the medical record of a discussion with a provider or initiation of a discussion by a provider during the measurement year.
- **Oral statements.** Conversations with relatives or friends about life-sustaining treatment and end-of-life care, documented in the medical record. Patient designation of an individual who can make decisions on behalf of the patient. Evidence of oral statements must be noted in the medical record during the measurement year.

Medication Review At least one medication review conducted by a prescribing practitioner or clinical pharmacist during the measurement year ***and*** the presence of a medication list in the medical record, as documented through either administrative data or medical record review. A medication list, signed and dated during the measurement year by the appropriate practitioner type (prescribing practitioner or clinical pharmacist), meets criteria (the practitioner's signature is considered evidence that the medications were reviewed).

Administrative Refer to *Administrative Specification* to identify positive numerator hits from administrative data.

Medical record

Documentation must come from the same medical record and must include one of the following:

- A medication list in the medical record, ***and*** evidence of a medication review by a prescribing practitioner or clinical pharmacist and the date when it was performed.
- Notation that the member is not taking any medication and the date when it was noted.

A review of side effects for a single medication at the time of prescription alone is not sufficient.

An outpatient visit is not required to meet criteria.

Functional Status Assessment

At least one functional status assessment during the measurement year, as documented through either administrative data or medical record review.

Administrative

Refer to *Administrative Specification* to identify positive numerator hits from administrative data.

Medical record

Documentation in the medical record must include evidence of a complete functional status assessment and the date when it was performed.

Notations for a complete functional status assessment must include one of the following:

- Notation that Activities of Daily Living (ADL) were assessed or that at least five of the following were assessed: bathing, dressing, eating, transferring [e.g., getting in and out of chairs], using toilet, walking.
- Notation that Instrumental Activities of Daily Living (IADL) were assessed or at least four of the following were assessed: shopping for groceries, driving or using public transportation, using the telephone, meal preparation, housework, home repair, laundry, taking medications, handling finances.
- Result of assessment using a standardized functional status assessment tool, not limited to:
  - SF-36®.
  - Assessment of Living Skills and Resources (ALSAR).
  - Barthel ADL Index Physical Self-Maintenance (ADLS) Scale.
  - Bayer ADL (B-ADL) Scale.
  - Barthel Index.
  - Extended ADL (EADL) Scale.
  - Independent Living Scale (ILS).
  - Katz Index of Independence in ADL.
  - Kenny Self-Care Evaluation.
  - Klein-Bell ADL Scale.
  - Kohlman Evaluation of Living Skills (KELS).
  - Lawton & Brody's IADL scales.

- Patient Reported Outcome Measurement Information System (PROMIS) Global or Physical Function Scales.

  - Notation that at least three of the following four components were assessed:

- Cognitive status.
- Ambulation status.
- Hearing, vision and speech (i.e., sensory ability).
- Other functional independence (e.g., exercise, ability to perform job).

A functional status assessment limited to an acute or single condition, event or body system (e.g., lower back, leg) does not meet criteria for a comprehensive functional status assessment. The components of the functional status assessment numerator may take place during separate visits within the measurement year.

Pain Assessment At least one pain assessment during the measurement year, as documented through either administrative data or medical record review.

Administrative Refer to *Administrative Specification* to identify positive numerator hits from administrative data.

Medical record Documentation in the medical record must include evidence of a pain assessment and the date when it was performed.

Notations for a pain assessment must include one of the following:

- Documentation that the patient was assessed for pain (which may include positive or negative findings for pain).
- Result of assessment using a standardized pain assessment tool, not limited to:

- Numeric rating scales (verbal or written).
- Face, Legs, Activity, Cry Consolability (FLACC) scale.
- Verbal descriptor scales (5–7 Word Scales, Present Pain Inventory).
- Pain Thermometer.
- Pictorial Pain Scales (Faces Pain Scale, Wong-Baker Pain Scale).
- Visual analogue scale.
- Brief Pain Inventory.
- Chronic Pain Grade.
- PROMIS Pain Intensity Scale.
- Pain Assessment in Advanced Dementia (PAINAD) Scale.

Note

- *Notation of a pain management plan alone does not meet criteria.*
- *Notation of a pain treatment plan alone does not meet criteria.*
- *Notation of screening for chest pain alone or documentation of chest pain alone does not meet criteria.*
- *Refer to Appendix 3 for the definition of* clinical pharmacist *and* prescribing practitioner

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements. Cells with a dash (—) indicate data are not required.

Table COA-3: Data Elements for Care for Older Adults

	Administrative	Hybrid
Measurement year	*Each of the 4 rates*	*Each of the 4 rates*
Data collection methodology (Administrative or Hybrid)	*Each of the 4 rates*	*Each of the 4 rates*
Eligible population	*Each of the 4 rates*	*Each of the 4 rates*
Number of numerator events by administrative data in eligible population (before exclusions)	—	*Each of the 4 rates*
Current year's administrative rate (before exclusions)	—	*Each of the 4 rates*
Minimum required sample size (MRSS) or other sample size	—	*Each of the 4 rates*
Oversampling rate	—	*Each of the 4 rates*
Final sample size (FSS)	—	*Each of the 4 rates*
Number of numerator events by administrative data in FSS	—	*Each of the 4 rates*
Administrative rate on FSS	—	*Each of the 4 rates*
Number of original sample records excluded because of valid data errors	—	*Each of the 4 rates*
Number of employee/dependent medical records excluded	—	*Each of the 4 rates*
Records added from the oversample list	—	*Each of the 4 rates*
Denominator	—	*Each of the 4 rates*
Numerator events by administrative data	*Each of the 4 rates*	*Each of the 4 rates*
Numerator events by medical records	—	*Each of the 4 rates*
Numerator events by supplemental data	*Each of the 4 rates*	*Each of the 4 rates*
Reported rate	*Each of the 4 rates*	*Each of the 4 rates*
Lower 95% confidence interval	*Each of the 4 rates*	*Each of the 4 rates*
Upper 95% confidence interval	*Each of the 4 rates*	*Each of the 4 rates*

Use of Spirometry Testing in the Assessment and Diagnosis of COPD (SPR)

Summary of Changes to HEDIS 2016

- Revised the method and value sets to identify acute inpatient events for steps 1 and 2 of the event/diagnosis.
- Clarified when to use admission or discharge dates when determining Negative Diagnosis History.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of members 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.

Definitions

Intake Period	A 12-month window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year. The Intake Period captures the first COPD diagnosis.
IESD	Index Episode Start Date. The earliest date of service for an eligible visit (outpatient, ED or acute inpatient) during the Intake Period with any diagnosis of COPD. *For an outpatient claim/encounter,* the IESD is the date of service. *For an acute inpatient claim/encounter,* the IESD is the date of discharge. *For a transfer or readmission*, the IESD is the discharge date of the original admission.
Negative Diagnosis History	A 731-day period beginning 730 days (2 years) prior to the IESD and ending on the IESD, when the member had no claims/encounters containing any diagnosis of COPD. *For an acute inpatient IESD*, use the IESD date of admission to determine the 731-day period.

Eligible Population

Product lines	Commercial, Medicaid, Medicare (report each product line separately).
Ages	42 years or older as of December 31 of the measurement year.
Continuous enrollment	730 days (2 years) prior to the IESD through 180 days (6 months) after the IESD.

Allowable gap One gap in enrollment of up to 45 days is allowed in each of the 12-month periods prior to the IESD or in the 6-month period after the IESD, for a maximum of two gaps total. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Anchor date IESD.

Benefit Medical.

Event/ diagnosis The first visit with a diagnosis of COPD during the Intake Period. Follow the steps below to identify the eligible population for the measure.

Step 1 Identify all members who had any of the following during the Intake Period.

- An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set).

– Do not include ED visits that result in an inpatient admission.

- An acute inpatient discharge with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). To identify acute inpatient discharges:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the discharge date for the stay.

If the member had more than one eligible visit, include only the first visit.

Step 2 Test for Negative Diagnosis History. Exclude members who had any of the following during the 731-day period prior to the IESD:

- An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set).

– Do not include ED visits that result in an inpatient admission.

- An acute inpatient discharge with any diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). To identify acute inpatient discharges:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the discharge date for the stay.

For an acute inpatient IESD, use the IESD date of admission to determine the 731-day period.

Step 3 Calculate continuous enrollment. Members must be continuously enrolled in the organization 730 days (2 years) prior to the IESD through 180 days (6 months) after the IESD.

Administrative Specification

Denominator The eligible population.

Numerator At least one claim/encounter for spirometry (Spirometry Value Set) during the 730 days (2 years) prior to the IESD through 180 days (6 months) after the IESD.

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table SPR-1/2/3: Data Elements for Use of Spirometry Testing in the Assessment and Diagnosis of COPD

	Administrative
Measurement year	Y
Data collection methodology (Administrative)	Y
Eligible population	Y
Numerator events by administrative data	Y
Numerator events by supplemental data	Y
Reported rate	Y
Lower 95% confidence interval	Y
Upper 95% confidence interval	Y

Pharmacotherapy Management of COPD Exacerbation (PCE)

Summary of Changes to HEDIS 2016

- Revised the method and value sets to identify acute and nonacute inpatient events for steps 1, 3 and 4 of the event/diagnosis.
- Added olodaterol hydrochloride to the description of "Beta 2-agonists" in Table PCE-D.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of COPD exacerbations for members 40 years of age and older who had an acute inpatient discharge or ED visit on or between January 1–November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported:

1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event.
2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event.

Note: *The eligible population for this measure is based on acute inpatient discharges and ED visits, not on members. It is possible for the denominator to include multiple events for the same individual.*

Definitions

Intake Period An 11-month period that begins on January 1 of the measurement year and ends on November 30 of the measurement year. The Intake Period captures eligible episodes of treatment.

Episode Date The date of service for any acute inpatient discharge or ED claim/encounter during the Intake Period with a principal diagnosis of COPD.

For an acute inpatient claim/encounter, the Episode Date is the date of discharge.

For an ED claim/encounter, the Episode Date is the date of service.

Active prescription A prescription is considered active if the "days supply" indicated on the date the member filled the prescription is the number of days or more between that date and the relevant date.

For an acute inpatient claim/encounter, the relevant date is the date of admission.

For an ED claim/encounter, the relevant date is the date of service.

Eligible Population

Product lines Commercial, Medicaid, Medicare (report each product line separately).

Ages 40 years or older as of January 1 of the measurement year.

Continuous enrollment Episode Date through 30 days after the Episode Date.

Allowable gap None.

Anchor date Episode Date.

Benefits Medical and pharmacy.

Event/ diagnosis A COPD exacerbation as indicated by an acute inpatient discharge or ED encounter with a principal diagnosis of COPD.

Follow the steps below to identify the eligible population.

Step 1 Identify all members who had either of the following during the Intake Period:

- An ED visit (ED Value Set) with a primary diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set).

– Do not include ED visits that result in an inpatient admission.

- An acute inpatient discharge with a primary diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). To identify acute inpatient discharges:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the discharge date for the stay.

Step 2 Identify all COPD Episode Dates. For each member identified in step 1, identify all acute inpatient discharges and ED visits.

Step 3 Test for transfers. Exclude Episode Dates when the member was transferred directly to an acute or nonacute inpatient care setting for any diagnosis. Organizations must identify "transfers" using their own methods and then confirm the acute or nonacute inpatient care setting using codes in the Inpatient Stay Value Set.

Step 4 Test for readmission and additional ED visits.

Exclude Episode Dates when the member was readmitted to an acute or nonacute inpatient care setting for any diagnosis within 14 days after the Episode Date. To identify readmissions to an acute or nonacute inpatient care setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Identify the admission date for the stay.

Exclude Episode Dates when the member had an ED visit (ED Value Set) for any diagnosis within 14 days after the Episode Date.

Step 5 Calculate continuous enrollment. The member must be continuously enrolled without a gap in coverage from the Episode Date through 30 days after the Episode Date.

Note: *All Episode Dates that were not excluded remain in the denominator. The denominator for this measure is based on acute inpatient discharges and ED visits, not members.*

Administrative Specification

Denominator The eligible population.

Numerators

Systemic corticosteroid Dispensed prescription for systemic corticosteroid (Table PCE-C) on or 14 days after the Episode Date. Count systemic corticosteroids that are active on the relevant date.

Table PCE-C: Systemic Corticosteroids

Description	Prescription			
Glucocorticoids	• Betamethasone • Dexamethasone	• Hydrocortisone • Methylprednisolone	• Prednisolone • Prednisone	• Triamcinolone

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Bronchodilator Dispensed prescription for a bronchodilator (Table PCE-D) on or 30 days after the Episode Date. Count bronchodilators that are active on the relevant date.

Table PCE-D: Bronchodilators

Description	Prescription		
Anticholinergic agents	• Albuterol-ipratropium • Aclidinium-bromide	• Ipratropium • Tiotropium	• Umeclidinium
Beta 2-agonists	• Albuterol • Arformoterol • Budesonide-formoterol • Fluticasone-salmeterol • Fluticasone-vilanterol	• Formoterol • Indacaterol • Levalbuterol • Mometasone-formoterol • Metaproterenol	• Olodaterol hydrochloride • Pirbuterol • Salmeterol • Umeclidinium-vilanterol
Methylxanthines	• Aminophylline • Dyphylline-guaifenesin • Guaifenesin-theophylline	• Dyphylline • Theophylline	

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table PCE-1/2/3: Data Elements for Pharmacotherapy Management of COPD Exacerbation

	Administrative
Measurement year	Y
Data collection methodology (Administrative)	Y
Eligible population	Y
Numerator events by administrative data	*Each of the 2 rates*
Numerator events by supplemental data	*Each of the 2 rates*
Reported rate	*Each of the 2 rates*
Lower 95% confidence interval	*Each of the 2 rates*
Upper 95% confidence interval	*Each of the 2 rates*

Controlling High Blood Pressure (CBP)

Summary of Changes to HEDIS 2016

- Revised a value set used to identify the event/diagnosis.
  - Added HCPCS codes to identify outpatient visits.
  - Renamed the Outpatient CPT Value Set to Outpatient Without UBREV Value Set.
- Clarified how to assign the diabetes flag.
- Removed the criteria for polycystic ovaries when assigning a flag of "not diabetic" in the event/ diagnosis.
- Clarified the denominator section of the Hybrid Specification to state that if the hypertension diagnosis is not confirmed, the member is excluded and replaced by a member from the oversample.
- Added a method and value sets to identify nonacute inpatient admissions for optional exclusions.
- Added a *Note* to clarify when organizations may change the diabetes flag that was assigned based on administrative data.

Description

The percentage of members 18–85 years of age who had a diagnosis of hypertension (HTN) and whose BP was adequately controlled during the measurement year based on the following criteria:

- Members 18–59 years of age whose BP was <140/90 mm Hg.
- Members 60–85 years of age with a diagnosis of diabetes whose BP was <140/90 mm Hg.
- Members 60–85 years of age without a diagnosis of diabetes whose BP was <150/90 mm Hg.

Note: *Use the Hybrid Method for this measure. A single rate is reported and is the sum of all three groups.*

Definitions

Adequate control

Adequate control is defined as meeting any of the following criteria:

- Members 18–59 years of age whose BP was <140/90 mm Hg.
- Members 60–85 years of age with a diagnosis of diabetes whose BP was <140/90 mm Hg.
- Members 60–85 years of age without a diagnosis of diabetes whose BP was <150/90 mm Hg.

Representative BP

The most recent BP reading during the measurement year (as long as it occurred after the diagnosis of hypertension). If multiple BP measurements occur on the same date, or are noted in the chart on the same date, use the lowest systolic and lowest diastolic BP reading. If no BP is recorded during the measurement year, assume that the member is "not controlled."

Eligible Population

Product lines	Commercial, Medicaid, Medicare (report each product line separately).
Ages	18–85 years as of December 31 of the measurement year.
Continuous enrollment	The measurement year.
Allowable gap	No more than one gap in continuous enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
Anchor date	December 31 of the measurement year.
Benefit	Medical.
Event/diagnosis	Members are identified as hypertensive if there is at least one outpatient visit (Outpatient Without UBREV Value Set) with a diagnosis of hypertension (Essential Hypertension Value Set) during the first six months of the measurement year.
Diabetes Flag for Numerator Assessment	After the Eligible Population is identified, assign each member either a ***diabetic*** or ***not diabetic*** flag using only administrative data and the steps below. The flag is used to determine the appropriate BP threshold to use during numerator assessment (the threshold for members with diabetes is different than the threshold for members without diabetes).
Step 1	Assign a flag of ***diabetic*** to members identified as diabetic using claim/encounter data or pharmacy data. The organization must use both methods to assign the diabetes flag, but a member only needs to be identified by one method. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year. *Claim/encounter data.* Members who met any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years): • At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two visits. • At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

Pharmacy data. Members who were dispensed insulin or hypoglycemics/ antihyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (Table CDC-A).

Step 2 From the members identified in Step 1, assign a flag of ***not diabetic*** to members who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year ***and*** who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year.

Note: *Members classified as diabetic in step 1 based on pharmacy data alone and who had a diagnosis of gestational or steroid-induced diabetes as specified above are reclassified as* ***not diabetic*** *in this step.*

Step 3 For members who were not assigned a flag in step 1 or step 2, assign a flag of ***not diabetic***.

Hybrid Specification

Denominator A systematic sample drawn from the eligible population for each product line whose diagnosis of hypertension is confirmed by chart review. The organization may reduce the sample size using the prior year's audited, product line-specific rate. Refer to the *Guidelines for Calculations and Sampling* for information on reducing the sample size.

To confirm the diagnosis of hypertension, the organization must find notation of one of the following in the medical record anytime during the member's history on or before June 30 of the measurement year:

- Hypertension.
- HTN.
- High BP (HBP).
- Elevated BP (↑BP).
- Borderline HTN.
- Intermittent HTN.
- History of HTN.
- Hypertensive vascular disease (HVD).
- Hyperpiesia.
- Hyperpiesis.

It does not matter if hypertension was treated or is currently being treated. The notation indicating a diagnosis of hypertension may be recorded in any of the following documents:

- Problem list (this may include a diagnosis prior to June 30 of the measurement year or an undated diagnosis that is not part of the office visit note; see ***Note*** at the end of this section).
- Office note.
- Subjective, Objective, Assessment, Plan (SOAP) note.
- Encounter form.
- Diagnostic report.

- Hospital discharge summary.

Statements such as "rule out HTN," "possible HTN," "white-coat HTN," "questionable HTN" and "consistent with HTN" are not sufficient to confirm the diagnosis if such statements are the *only* notations of hypertension in the medical record.
If the diagnosis of hypertension cannot be confirmed, the member is excluded and replaced by the next member from the oversample.

Identifying the medical record

Use one medical record for both the confirmation of the diagnosis of hypertension and the representative BP. All eligible BP measurements recorded in the record must be considered. If an organization cannot find the medical record, the member remains in the measure denominator and is considered noncompliant for the numerator.

Use the following steps to find the appropriate medical record to review.

Step 1 Identify the member's PCP.

If the member had more than one PCP for the time period, identify the PCP who most recently provided care to the member.

If the member did not visit a PCP for the time period or does not have a PCP, identify the practitioner who most recently provided care to the member.

If a practitioner other than the member's PCP manages the hypertension, the organization may use the medical record of that practitioner.

Step 2 Use one medical record to both confirm the diagnosis for the denominator and identify the representative BP level for the numerator. There are circumstances in which the organization may need to go to a second medical record to either confirm the diagnosis or obtain the BP reading, as in the following two examples.

If a member sees one PCP during the denominator confirmation period (on or before June 30 of the measurement year) and another PCP after June 30, the diagnosis of hypertension and the BP reading may be identified through two different medical records.

If a member has the same PCP for the entire measurement year, but it is clear from claims or medical record data that a specialist (e.g., cardiologist) manages the member's hypertension after June 30, the organization may use the PCP's chart to confirm the diagnosis and use the specialist's chart to obtain the BP reading. For example, if all recent claims coded with 401 came from the specialist, the organization may use this chart for the most recent BP reading. If the member did not have any visit with the specialist prior to June 30 of the measurement year, the organization must go to another medical record to confirm the diagnosis.

Numerator The number of members in the denominator whose most recent BP (both systolic and diastolic) is adequately controlled during the measurement year based on the following criteria:

- Members 18–59 years of age as of December 31 of the measurement year whose BP was <140/90 mm Hg.
- Members 60–85 years of age as of December 31 of the measurement year and flagged with a diagnosis of diabetes whose BP was <140/90 mm Hg.
- Members 60–85 years of age as of December 31 of the measurement year and flagged as not having a diagnosis of diabetes whose BP was <150/90 mm Hg.

To determine if the member's BP is adequately controlled, the representative BP must be identified.

Administrative None.

Medical record Follow the steps below to determine representative BP.

Step 1 Identify the most recent BP reading noted during the measurement year. The reading must occur after the date when the diagnosis of hypertension was confirmed.

Do not include BP readings:

- Taken during an acute inpatient stay or an ED visit.
- Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).
- Obtained the same day as a major diagnostic or surgical procedure (e.g., EKG/ECG, stress test, administration of IV contrast for a radiology procedure, endoscopy).
- Reported by or taken by the member.

If multiple readings were recorded for a single date, use the lowest systolic and lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading.

Step 2 Determine numerator compliance based on the following criteria:

- Members 18–59 years of age as of December 31 of the measurement year whose BP was <140/90 mm Hg.
- Members 60–85 years of age as of December 31 of the measurement year and flagged with a diagnosis of diabetes, whose BP was <140/90 mm Hg.
- Members 60–85 years of age as of December 31 of the measurement year and flagged as not having a diagnosis of diabetes, whose BP was <150/90 mm Hg.

The member is not compliant if the BP reading does not meet the specified threshold or is missing, or if there is no BP reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing).

Step 3 A single rate is reported for all three groups. Sum the numerator events from step 2 to obtain the rate.

Exclusions *(optional)*

- Exclude from the eligible population all members with evidence of end-stage renal disease (ESRD) (ESRD Value Set; ESRD Obsolete Value Set) or kidney transplant (Kidney Transplant Value Set) on or prior to December 31 of the measurement year. Documentation in the medical record must include a dated note indicating evidence of ESRD, kidney transplant or dialysis.
- Exclude from the eligible population all members with a diagnosis of pregnancy (Pregnancy Value Set) during the measurement year.
- Exclude from the eligible population all members who had a nonacute inpatient admission during the measurement year. To identify nonacute inpatient admissions:
  1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
  2. Confirm the stay was for nonacute care based on the presence of a nonacute code (Nonacute Inpatient Stay Value Set) on the claim.
  3. Identify the discharge date for the stay.

Note

- *Problem lists generally indicate established conditions; to discount undated entries might hinder confirmation of the denominator. If a problem list is found in an office visit note then it would be considered a dated problem list and the date of the visit must be used.*
- *Organizations generally require an oversample of 10 percent–15 percent to meet the MRSS for confirmed cases of hypertension.*
- *Only administrative data should be used to assign the diabetes flag. The intent of the flag is to determine the appropriate BP threshold to use for the member during numerator assessment. The only exception is if the member is flagged as a diabetic but medical record evidence contains information that classifies the member as a valid data error. To meet criteria as a valid data error, the medical record must contain no evidence of diabetes and include a notation that refutes the diagnosis, as described in Substituting Medical Records in the Guidelines for Calculations and Sampling. In this case, the diabetes flag may be changed to "not diabetic," but the member may not be removed from the sample.*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table CBP-1/2/3: Data Elements for Controlling High Blood Pressure

	Hybrid
Measurement year	Y
Data collection methodology (Hybrid)	Y
Eligible population	Y
Number of numerator events by administrative data in eligible population (before exclusions)	Y
Current year's administrative rate (before exclusions)	Y
Minimum required sample size (MRSS) or other sample size	Y
Oversampling rate	Y
Final sample size (FSS)	Y
Number of numerator events by administrative data in FSS	Y
Administrative rate on FSS	Y
Number of original sample records excluded because of valid data errors	Y
Number of records excluded because of false-positive diagnoses	Y
Number of administrative data records excluded	Y
Number of medical record data records excluded	Y
Number of employee/dependent medical records excluded	Y
Records added from the oversample list	Y
Denominator	Y
Numerator events by administrative data	Y
Numerator events by medical records	Y
Reported rate	Y
Lower 95% confidence interval	Y
Upper 95% confidence interval	Y

Persistence of Beta-Blocker Treatment After a Heart Attack (PBH)

Summary of Changes to HEDIS 2016

- Added a method and value sets to identify acute inpatient discharges and transfer setting (acute or nonacute inpatient) for the event/diagnosis.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of members 18 years of age and older during the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of AMI and who received persistent beta-blocker treatment for six months after discharge.

Definition

Treatment days (covered days)	The actual number of calendar days covered with prescriptions within the specified 180-day measurement interval (i.e., a prescription of a 90-day supply dispensed on the 100th day will have 80 days counted in the 180-day interval).
180-day measurement interval	The 180 day period that includes the discharge date and the 179 days after discharge.

Eligible Population

Product lines	Commercial, Medicaid, Medicare (report each product line separately).
Ages	18 years and older as of December 31 of the measurement year.
Continuous enrollment	Discharge date through 179 days after discharge.
Allowable gap	No more than one gap in enrollment of up to 45 days within the 180 days of the event. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not continuously enrolled).
Anchor date	Discharge date.
Benefit	Medical and pharmacy.
Event/diagnosis	An acute inpatient discharge with any diagnosis of AMI (AMI Value Set) from July 1 of the year prior to the measurement year through June 30 of the measurement year. To identify an acute inpatient discharge:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the discharge date for the stay.

Transfers to an acute inpatient care setting. Include hospitalizations in which the member was transferred directly to another acute inpatient care setting for any diagnosis. Count the discharge from the subsequent acute inpatient stay, not the initial discharge. The discharge date from the subsequent acute inpatient stay must occur on or before June 30 of the measurement year. Organizations must identify "transfers" using their own methods and then confirm the acute inpatient care setting. To confirm the acute inpatient care setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).

Transfers to a nonacute inpatient care setting. Exclude from the denominator, hospitalizations in which the member was transferred directly to a nonacute inpatient care setting for any diagnosis. Organizations must identify "transfers" using their own methods and then confirm the nonacute inpatient setting. To confirm the nonacute inpatient setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Confirm the stay was for nonacute inpatient care based on the presence of a nonacute code (Nonacute Inpatient Stay Value Set) on the claim.

If a member has more than one episode of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year that meets the event/diagnosis criteria, only include the first discharge.

Administrative Specification

Denominator The eligible population.

Numerator A 180-day course of treatment with beta-blockers (Table PBH-B).

Identify all members in the denominator population whose dispensed days supply is ≥135 days in the 180-day measurement interval. Persistence of treatment for this measure is defined as at least 75 percent of the days supply filled.

To determine continuity of treatment during the 180-day period, identify all prescriptions filled within 180-day measurement interval, and add the number of allowed gap days to the number of treatment days for a maximum of 180 days (i.e., 135 treatment days + 45 gap days = 180 days).

To account for members who are on beta-blockers prior to admission, factor those prescriptions into adherence rates if the actual treatment days fall within the 180-day measurement interval.

Table PBH-B: Beta-Blocker Medications

Description	Prescription
Noncardioselective beta-blockers	• Carvedilol • Labetalol • Nadolol • Penbutolol • Pindolol • Propranolol • Timolol • Sotalol
Cardioselective beta-blockers	• Acebutolol • Atenolol • Betaxolol • Bisoprolol • Metoprolol • Nebivolol
Antihypertensive combinations	• Atenolol-chlorthalidone • Bendroflumethiazide-nadolol • Bisoprolol-hydrochlorothiazide • Hydrochlorothiazide-metoprolol • Hydrochlorothiazide-propranolol

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Exclusion (optional)

Members identified as having an intolerance or allergy to beta-blocker therapy. Any of the following anytime during the member's history through the end of the continuous enrollment period meet criteria:

- Asthma (Asthma Value Set).
- COPD (COPD Value Set).
- Obstructive chronic bronchitis (Obstructive Chronic Bronchitis Value Set).
- Chronic respiratory conditions due to fumes and vapors (Chronic Respiratory Conditions Due to Fumes/Vapors Value Set).
- Hypotension, heart block >1 degree or sinus bradycardia (Beta-Blocker Contraindications Value Set).
- A medication dispensing event indicative of a history of asthma (Table PBH-D).
- Intolerance or allergy to beta-blocker therapy.

Table PBH-D: Medications to Identify Exclusions (History of Asthma)

Description	Prescription
Bronchodilator combinations	• Albuterol-ipratropium • Budesonide-formoterol • Fluticasone-salmeterol • Mometasone-formoterol
Inhaled corticosteroids	• Beclomethasone • Budesonide • Ciclesonide • Flunisolide • Fluticasone • Fluticasone CFC free • Mometasone

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table PBH-1/2/3: Data Elements for Persistence of Beta-Blocker Treatment After a Heart Attack

	Administrative
Measurement year	Y
Data collection methodology (Administrative)	Y
Eligible population	Y
Number of optional exclusions	Y
Numerator events by administrative data	Y
Numerator events by supplemental data	Y
Reported rate	Y
Lower 95% confidence interval	Y
Upper 95% confidence interval	Y

Annual Monitoring for Patients on Persistent Medications (MPM)

Summary of Changes to HEDIS 2016

- Added value sets to identify acute and nonacute inpatient encounters for the optional exclusions.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of members 18 years of age and older who received at least 180 treatment days of ambulatory medication therapy for a select therapeutic agent during the measurement year and at least one therapeutic monitoring event for the therapeutic agent in the measurement year. For each product line, report each of the three rates separately and as a total rate.

- Annual monitoring for members on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB).
- Annual monitoring for members on digoxin.
- Annual monitoring for members on diuretics.
- Total rate (the sum of the three numerators divided by the sum of the three denominators).

Eligible Population

Product lines	Commercial, Medicaid, Medicare (report each product line separately).
Ages	18 years and older as of December 31 of the measurement year.
Continuous enrollment	The measurement year.
Allowable gap	No more than one gap in enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
Anchor date	December 31 of the measurement year.
Benefits	Medical and pharmacy.
Event/ diagnosis	Members on persistent medications (i.e., members who received at least 180 treatment days of ambulatory medication in the measurement year). Refer to Additional Eligible Population Criteria for each rate. Treatment days are the actual number of calendar days covered with prescriptions within the measurement year (i.e., a prescription of 90 days supply dispensed on December 1 of the measurement year counts as 30

treatment days). Sum the days supply for all medications and subtract any days supply that extends beyond December 31 of the measurement year.

Note: *Medications dispensed in the year prior to the measurement year must be counted toward the 180 treatment days.*

Administrative Specification

For each product line, report each of the three rates separately and as a combined rate. The total rate is the sum of the three numerators divided by the sum of the three denominators.

Rate 1: Annual Monitoring for Members on ACE Inhibitors or ARBs

Additional eligible population criteria

Members who received at least 180 treatment days of ACE inhibitors or ARBs, during the measurement year. Refer to Table CDC-L to identify ACE inhibitors and ARBs.

Note: *Members may switch therapy with any medication listed in Table CDC-L during the measurement year and have the days supply for those medications count toward the total 180 treatment days (i.e., a member who received 90 days of ACE inhibitors and 90 days of ARBs meets the denominator definition for rate 1).*

Numerator

At least one serum potassium and a serum creatinine therapeutic monitoring test in the measurement year. Any of the following during the measurement year meet criteria:

- A lab panel test (Lab Panel Value Set).
- A serum potassium test (Serum Potassium Value Set) ***and*** a serum creatinine test (Serum Creatinine Value Set).

Note: *The tests do not need to occur on the same service date, only within the measurement year.*

Rate 2: Annual Monitoring for Members on Digoxin

Additional eligible population criteria

Members who received at least 180 treatment days of digoxin (Table MPM-B) during the measurement year.

Table MPM-B: Drugs to Identify Members on Digoxin

Description	Prescription
Inotropic agents	Digoxin

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Numerator

At least one serum potassium, at least one serum creatinine, *and* at least one serum digoxin therapeutic monitoring test in the measurement year. Any of the following during the measurement year meet criteria:

- A lab panel test (Lab Panel Value Set) ***and*** a serum digoxin test (Digoxin Level Value Set).
- A serum potassium test (Serum Potassium Value Set) ***and*** a serum creatinine test (Serum Creatinine Value Set) ***and*** a serum digoxin test (Digoxin Level Value Set).

Note: *The tests do not need to occur on the same service date, only within the measurement year.*

Rate 3: Annual Monitoring for Members on Diuretics

Additional eligible population criteria

Members who received at least 180 treatment days of a diuretic (Table MPM-C), during the measurement year.

Note: *Members may switch therapy with any medication listed in Table MPM-C during the measurement year and have the days supply for those medications count toward the total 180 treatment days.*

Table MPM-C: Drugs to Identify Members on Diuretics

Description	Prescription
Antihypertensive combinations	• Aliskiren-hydrochlorothiazide • Aliskiren-hydrochlorothiazide-amlodipine • Amiloride-hydrochlorothiazide • Amlodipine-hydrochlorothiazide-olmesartan • Amlodipine-hydrochlorothiazide-valsartan • Atenolol-chlorthalidone • Azilsartan-chlorthalidone • Benazepril-hydrochlorothiazide • Bendroflumethiazide-nadolol • Bisoprolol-hydrochlorothiazide • Candesartan-hydrochlorothiazide • Captopril-hydrochlorothiazide • Chlorthalidone-clonidine • Enalapril-hydrochlorothiazide • Eprosartan-hydrochlorothiazide • Fosinopril-hydrochlorothiazide • Hydrochlorothiazide-irbesartan • Hydrochlorothiazide-lisinopril • Hydrochlorothiazide-losartan • Hydrochlorothiazide-methyldopa • Hydrochlorothiazide-metoprolol • Hydrochlorothiazide-moexipril • Hydrochlorothiazide-olmesartan • Hydrochlorothiazide-propranolol • Hydrochlorothiazide-quinapril • Hydrochlorothiazide-spironolactone • Hydrochlorothiazide-telmisartan • Hydrochlorothiazide-triamterene • Hydrochlorothiazide-valsartan
Loop diuretics	• Bumetanide • Ethacrynic acid • Furosemide • Torsemide
Potassium-sparing diuretics	• Amiloride • Eplerenone • Spironolactone • Triamterene
Thiazide diuretics	• Chlorothiazide • Chlorthalidone • Hydrochlorothiazide • Indapamide • Methyclothiazide • Metolazone

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Numerator

At least one serum potassium *and* a serum creatinine therapeutic monitoring test in the measurement year. Any of the following during the measurement year meet criteria:

- A lab panel test (Lab Panel Value Set).
- A serum potassium test (Serum Potassium Value Set) ***and*** a serum creatinine test (Serum Creatinine Value Set).

Note: *The tests do not need to occur on the same service date, only within the measurement year.*

Exclusion *(optional)*

Exclude members from each eligible population who had an acute inpatient encounter (Acute Inpatient Value Set) or nonacute inpatient encounter (Nonacute Inpatient Value Set) during the measurement year.

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table MPM-1/2/3: Data Elements for Annual Monitoring for Patients on Persistent Medications

	Administrative
Measurement year	Y
Data collection methodology (Administrative)	Y
Eligible population	*For each of the 3 rates and total*
Number of optional exclusions	*For each of the 3 rates and total*
Numerator events by administrative data	*For each of the 3 rates and total*
Numerator events by supplemental data	*For each of the 3 rates and total*
Reported rate	*For each of the 3 rates and total*
Lower 95% confidence interval	*For each of the 3 rates and total*
Upper 95% confidence interval	*For each of the 3 rates and total*

Medication Reconciliation Post-Discharge (MRP)

Summary of Changes to HEDIS 2016

- Added Medicare as a product line.
- Expanded the age range to include Medicare beneficiaries 18 years and older.
- Clarified that the time frame for medication reconciliation is the discharge date through 30 days after discharge (31 days total).
- Added value sets to identify acute and nonacute inpatient discharges, readmissions and transfer setting for the event/diagnosis.
- Clarified medical record documentation requirements for medication reconciliation.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of discharges from January 1–December 1 of the measurement year for members 18 years of age and older for whom medications were reconciled the date of discharge through 30 days after discharge (31 total days).

Definition

Medication reconciliation	A type of review in which the discharge medications are reconciled with the most recent medication list in the outpatient medical record.

Eligible Population

Product line	Medicare.
Ages	18 years and older as of December 31 of the measurement year.
Continuous enrollment	Date of discharge through 30 days after discharge (31 total days).
Allowable gap	None.
Anchor date	Date of discharge.
Benefit	Medical.
Event/ diagnosis	An acute or nonacute inpatient discharge on or between January 1 and December 1 of the measurement year. To identify acute and nonacute inpatient discharges: 1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). 2. Identify the discharge date for the stay.

The denominator for this measure is based on discharges, not members. If members have more than one discharge, include all discharges on or between January 1 and December 1 of the measurement year.

Readmission or direct transfer

If the discharge is followed by a readmission or direct transfer to an acute or nonacute inpatient care setting on the date of discharge through 30 days after discharge (31 total days), count only the last discharge. To identify readmissions during the 31-day period:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Identify the admission date for the stay (the admission date must occur during the 31-day period).
3. Identify the discharge date for the stay (the discharge date is the event date).

Organizations must identify "transfers" using their own methods and then confirm the acute or nonacute inpatient care setting using the Inpatient Stay Value Set.

Exclude both the initial and the readmission/direct transfer discharges if the last discharge occurs after December 1 of the measurement year.

Note: *If a member remains in an acute or nonacute care setting through December 1 of the measurement year, a discharge is not included in the measure for this member, but the organization must have a method for identifying the member's status for the remainder of the measurement year, and may not assume the member remained admitted based only on the absence of a discharge before December 1.*

Administrative Specification

Denominator The eligible population.

Numerator Medication reconciliation (Medication Reconciliation Value Set) conducted by a prescribing practitioner, clinical pharmacist or registered nurse on the date of discharge through 30 days after discharge (31 total days).

Hybrid Specification

Denominator A systematic sample drawn from the eligible population. Organizations may reduce the sample size using the current year's administrative rate or the prior year's audited, product line-specific rate. Refer to the *Guidelines for Calculations and Sampling* for information on reducing the sample size.

The denominator is based on episodes, not on members. Members may appear more than once in the sample.

Numerator Medication reconciliation conducted by a prescribing practitioner, clinical pharmacist or registered nurse, as documented through either administrative data or medical record review the date of discharge through 30 days after discharge (31 total days).

Administrative Refer to *Administrative Specification* to identify positive numerator hits from administrative data.

Medical record Documentation in the medical record must include evidence of medication reconciliation and the date when it was performed. Any of the following meets criteria:

- Documentation that the provider reconciled the current and discharge medications.
- Documentation of the current medications with a notation that references the discharge medications (e.g., no changes in medications since discharge, same medications at discharge, discontinue all discharge medications).
- Documentation of the member's current medications with a notation that the discharge medications were reviewed.
- Documentation of a current medication list, a discharge medication list and notation that both lists were reviewed on the same date of service.
- Notation that no medications were prescribed or ordered upon discharge.

Only documentation in the outpatient chart meets the intent of the measure, but an outpatient visit is not required.

Note

- *The denominator is based on the discharge date found in administrative/claims data, but organizations may use other systems (including data found during medical record review) to identify data errors and make corrections.*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements. Cells with a dash (—) indicate data are not required.

Table MRP-3: Data Elements for Medication Reconciliation Post-Discharge

	Administrative	Hybrid
Measurement year	Y	Y
Data collection methodology (Administrative or Hybrid)	Y	Y
Eligible population	Y	Y
Number of numerator events by administrative data in eligible population (before exclusions)	—	Y
Current year's administrative rate (before exclusions)	—	Y
Minimum required sample size (MRSS) or other sample size	—	Y
Oversampling rate	—	Y
Final sample size (FSS)	—	Y
Number of numerator events by administrative data in FSS	—	Y
Administrative rate on FSS	—	Y
Number of original sample records excluded because of valid data errors	—	Y
Number of employee/dependent medical records excluded	—	Y
Records added from the oversample list	—	Y
Denominator	—	Y
Numerator events by administrative data	Y	Y
Numerator events by medical records	—	Y
Numerator events by supplemental data	Y	Y
Reported rate	Y	Y
Lower 95% confidence interval	Y	Y
Upper 95% confidence interval	Y	Y

Potentially Harmful Drug-Disease Interactions in the Elderly (DDE)

Summary of Changes to HEDIS 2016

- Revised the method and value sets to identify acute and nonacute inpatient discharges for step 1 of the Rate 1 additional eligible population criteria.
- Added Other Bipolar Disorder Value Set to step 2 required exclusions for Rate 1 and Rate 2.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of Medicare members 65 years of age and older who have evidence of an underlying disease, condition or health concern and who were dispensed an ambulatory prescription for a potentially harmful medication, concurrent with or after the diagnosis.

Report each of the three rates separately and as a total rate.

- A history of falls and a prescription for anticonvulsants, nonbenzodiazepine hypnotics, SSRIs, antiemetics, antipsychotics, benzodiazepines or tricyclic antidepressants.
- Dementia and a prescription for antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H_2 receptor antagonists, nonbenzodiazepine hypnotics or anticholinergic agents.
- Chronic kidney disease and prescription for Cox-2 selective NSAIDs or nonaspirin NSAIDs.
- Total rate (the sum of the three numerators divided by the sum of the three denominators).

Members with more than one disease or condition may appear in the measure multiple times (i.e., in each indicator for which they qualify). A lower rate represents better performance for all rates.

Definitions

IESD Index Episode Start Date. The earliest diagnosis, procedure or prescription between January 1 of the year prior to the measurement year and December 1 of the measurement year.

For an outpatient claim/encounter, the IESD is the date of service.

For an inpatient claim/encounter, the IESD is the discharge date.

For dispensed prescriptions, the IESD is the dispense date.

Eligible Population

Product line Medicare.

Age 67 years and older as of December 31 of the measurement year.

Continuous enrollment The measurement year and the year prior to the measurement year.

Allowable gap	No more than one gap in enrollment of up to 45 days during each year of continuous enrollment.
Anchor date	Enrolled as of December 31 of the measurement year.
Benefit	Medical and pharmacy.
Event/ diagnosis	Members with at least one disease, condition or procedure in the measurement year or the year prior to the measurement year. Refer to *Additional Eligible Population Criteria* for each rate.

Administrative Specification

Report each rate separately and as a combined rate. The total rate is the sum of the three numerators divided by the sum of the three denominators.

Rate 1: Drug-Disease Interactions—History of Falls and Anticonvulsants, Nonbenzodiazepine Hypnotics, SSRIs, Antiemetics, Antipsychotics, Benzodiazepines or Tricyclic Antidepressants

Additional eligible population criteria

An accidental fall or hip fracture* on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.

*Hip fractures are used as a proxy for identifying accidental falls.

Follow the steps below to identify the eligible population.

Step 1

Identify members who had an accidental fall or a hip fracture. Members with any of the following on or between January 1 of the year prior to the measurement year and
December 1 of the measurement year meet criteria:

- An accidental fall (Falls Value Set).
- An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) with a hip fracture (Hip Fractures Value Set).
- An acute or nonacute inpatient discharge with a hip fracture (Hip Fractures Value Set). To identify acute and nonacute inpatient discharges:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Identify the discharge date for the stay.

Identify the IESD for each member.

Step 2: Required Exclusions

Exclude members with a diagnosis of psychosis (Psychosis Value Set), schizophrenia (Schizophrenia Value Set), bipolar disorder (Bipolar Disorder Value Set; Other Bipolar Disorder Value Set) or seizure disorder (Seizure Disorders Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.

Numerator Dispensed an ambulatory prescription for an anticonvulsant, nonbenzodiazepine hypnotic, SSRI (Table DDE-A) or antiemetic, antipsychotic, benzodiazepine or tricyclic antidepressant (Table DDE-B) on or between the IESD and December 31 of the measurement year.

Table DDE-A: Potentially Harmful Drugs—Rate 1

Description	Prescription			
Anticonvulsants	• Carbamazepine • Clobazam • Divalproex sodium • Ethosuximide • Ethotoin • Ezogabine • Felbamate	• Fosphenytoin • Gabapentin • Lacosamide • Lamotrigine • Levetiracetam • Mephobarbital • Methsuximide	• Oxcarbazepine • Phenobarbital • Phenytoin • Pregabalin • Primidone • Rufinamide • Tiagabine HCL	• Topiramate • Valproate sodium • Valproic acid • Vigabatrin • Zonisamide
Nonbenzodiazepine hypnotics	• Eszopiclone	• Zaleplon	• Zolpidem	
SSRIs	• Citalopram • Escitalopram	• Fluoxetine • Fluvoxamine	• Paroxetine • Sertraline	

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Table DDE-B: Potentially Harmful Drugs—Rate 1 and Rate 2

Description	Prescription			
Antiemetics	• Prochlorperazine	• Promethazine		
Antipsychotics	• Aripiprazole • Asenapine • Chlorpromazine • Clozapine • Fluphenazine • Haloperidol	• Iloperidone • Loxapine • Lurasidone • Molindone • Olanzapine • Paliperidone	• Perphenazine • Pimozide • Quetiapine • Risperidone • Thioridazine • Thiothixene	• Trifluoperazine • Ziprasidone
Benzodiazepines	• Alprazolam • Chlordiazepoxide products • Clonazepam • Clorazepate-dipotassium	• Diazepam • Estazolam • Flurazepam HCL • Lorazepam • Midazolam HCL	• Oxazepam • Quazepam • Temazepam • Triazolam	
Tricyclic antidepressants	• Amitriptyline • Amoxapine • Clomipramine	• Desipramine • Doxepin (>6 mg) • Imipramine	• Nortriptyline • Protriptyline • Trimipramine	

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Rate 2: Drug-Disease Interactions—*Dementia* and Antiemetics, Antipsychotics, Benzodiazepines, Tricyclic Antidepressants, H_2 Receptor Antagonists, Nonbenzodiazepine Hypnotics or Anticholinergic Agents

Additional eligible population criteria

Follow the steps below to identify the eligible population.

Step 1 Identify members with a diagnosis of dementia (Dementia Value Set) or a dispensed dementia medication (Table DDE-C) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year. Identify the IESD for each member.

Table DDE-C: Prescriptions to Identify Members With Dementia

Description	Prescription
Cholinesterase inhibitors	• Donepezil • Galantamine • Rivastigmine
Miscellaneous central nervous system agents	• Memantine

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Step 2: Required exclusions

Exclude members with a diagnosis of psychosis (Psychosis Value Set), schizophrenia (Schizophrenia Value Set) or bipolar disorder (Bipolar Disorder Value Set; Other Bipolar Disorder Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.

Numerator

Dispensed an ambulatory prescription for an antiemetic, antipsychotic, benzodiazepine or tricyclic antidepressant (Table DDE-B) or H2 receptor antagonist, nonbenzodiazepine hypnotic or anticholinergic agent (Table DDE-D) on or between the IESD and December 31 of the measurement year.

Table DDE-D: Potentially Harmful Drugs—Rate 2

Description	Prescription			
H2 receptor antagonists	• Cimetidine	• Famotidine	• Nizatidine	• Ranitidine
Nonbenzodiazepine hypnotics	• Zolpidem			
Anticholinergic agents, antihistamines	• Carbinoxamine • Chlorpheniramine • Hydroxyzine products	• Loratadine • Brompheniramine • Clemastine • Cyproheptadine	• Dimenhydrinate • Diphenhydramine • Meclizine	
Anticholinergic agents, antispasmodics	• Atropine products • Homatropine • Belladonna alkaloids	• Dicyclomine • Hyoscyamine products • Propantheline	• Scopolamine	
Anticholinergic agents, antimuscarinics (oral)	• Darifenacin • Fesoterodine • Solifenacin	• Trospium • Flavoxate	• Oxybutynin • Tolterodine	
Anticholinergic agents, anti-Parkinson agents	• Benztropine	• Trihexyphenidyl		
Anticholinergic agents, skeletal muscle relaxants	• Tizanidine	• Carisoprodol	• Cyclobenzaprine	• Orphenadrine

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Rate 3: Drug-Disease Interactions—Chronic Kidney Disease and Cox-2 Selective NSAIDs or Nonaspirin NSAIDs

Additional eligible population criteria

Chronic kidney disease as identified by a diagnosis of ESRD (ESRD Value Set), stage 4 chronic kidney disease (CKD Stage 4 Value Set) or kidney transplant (Kidney Transplant Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year. Identify the IESD for each member.

Numerator

Dispensed an ambulatory prescription for an NSAID or Cox-2 selective NSAID (Table DDE-E) on or between the IESD and December 31 of the measurement year.

Table DDE-E: Cox-2 Selective NSAIDs and Nonaspirin NSAIDs

Description	Prescription			
Cox-2 Selective NSAIDs	• Celecoxib			
Nonaspirin NSAIDs	• Diclofenac potassium • Diclofenac sodium • Etodolac • Fenoprofen • Flurbiprofen	• Ibuprofen • Indomethacin • Ketoprofen • Ketorolac • Meclofenamate	• Mefenamic acid • Meloxicam • Nabumetone • Naproxen • Naproxen sodium	• Oxaprozin • Piroxicam • Sulindac • Tolmetin

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table DDE-3: Data Elements for Potentially Harmful Drug-Disease Interactions in the Elderly

	Administrative
Measurement year	Y
Data collection methodology (Administrative)	Y
Eligible population	*For each of the 3 rates and total*
Number of required exclusions	*Rate 1, Rate 2 and total*
Numerator events by administrative data	*For each of the 3 rates and total*
Numerator events by supplemental data	*For each of the 3 rates and total*
Reported rate	*For each of the 3 rates and total*
Lower 95% confidence interval	*For each of the 3 rates and total*
Upper 95% confidence interval	*For each of the 3 rates and total*

Use of High-Risk Medications in the Elderly (DAE)

Summary of Changes to HEDIS 2016

- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

- The percentage of Medicare members 66 years of age and older who received at least one high-risk medication.
- The percentage of Medicare members 66 years of age and older who received at least two different high-risk medications.

For both rates, a lower rate represents better performance.

Definitions

Calculating days supply

Calculate the days supply during the measurement year for medication classes in Table DAE-B. The intent is to sum the days supply for all medications (listed in the "Prescription" column) within a medication class (listed in the "Description" column). For example, a 30-days supply prescription for zolpidem and a 30-days supply prescription for zaleplon are equal to a 60-days supply of a high-risk medication class.

Sum the days supply and subtract any days supply that extends beyond December 31 of the measurement year. For example, a prescription of a 90-days supply dispensed on December 1 of the measurement year counts as a 30-days supply.

For Numerator 2, if the total days supply for all medications in a medication class is >90 days, count as one high-risk medication. Assess each medication class separately.

Note: *Medications dispensed in the year prior to the measurement year with a days supply that extends into the measurement year count toward the total days supply.*

Calculating average daily dose

Calculate the average daily dose for medications in Table DAE-C. Multiply the quantity of pills dispensed by the dose of each pill and divide by the days supply. For example, a prescription for a 30-days supply of digoxin containing 15 pills, .250 mg each pill, has an average daily dose of 0.125 mg.

To calculate daily dose for elixirs and concentrates, multiply the volume dispensed by dose and divide by the days supply.

For Numerator 2, two prescriptions for the same medication that meets the average daily dose criteria count as one high-risk medication. Two prescriptions for different medications that meet the average daily dose criteria count as two high-risk medications.

Do not round when calculating average daily dose.

Eligible Population

Product line	Medicare.
Age	66 years and older as of December 31 of the measurement year.
Continuous enrollment	The measurement year.
Allowable gap	No more than one gap in enrollment of up to 45 days during the measurement year.
Anchor date	Enrolled as of December 31 of the measurement year.
Benefits	Medical and pharmacy.
Event/ diagnosis	None.

Administrative Specification

Denominator	The eligible population.
Numerator 1	Members who received at least one high-risk medication during the measurement year.
Numerator 2	Members who received at least two different high-risk medications during the measurement year.

For both numerators, a high-risk medication is defined as any of the following:

- A dispensed prescription for a medication in Table DAE-A.
- Dispensed prescriptions that meet the days supply criteria within a medication class in Table DAE-B.
- A dispensed prescription that meets average daily dose criteria in Table DAE-C.

Note: *For medications in Table DAE-A and DAE-C, identify different drugs using the Drug ID field located in the NDC list on NCQA's Web site (www.ncqa.org), posted by November 2, 2015.*

Table DAE-A: High-Risk Medications

Description	Prescription	
Anticholinergics (excludes TCAs), first-generation antihistamines	• Brompheniramine • Carbinoxamine • Chlorpheniramine • Clemastine • Cyproheptadine • Dexbrompheniramine	• Dexchlorpheniramine • Diphenhydramine (oral) • Doxylamine • Hydroxyzine • Promethazine • Triprolidine
Anticholinergics (excludes TCAs), anti-Parkinson agents	• Benztropine (oral)	• Trihexyphenidyl
Antithrombotics	• Dipyridamole, oral short-acting (does not apply to the extended-release combination with aspirin)	• Ticlopidine
Cardiovascular, alpha agonists, central	• Guanabenz • Guanfacine	• Methyldopa
Cardiovascular, other	• Disopyramide	• Nifedipine, immediate release
Central nervous system, tertiary TCAs	• Amitriptyline • Clomipramine	• Imipramine • Trimipramine
Central nervous system, barbiturates	• Amobarbital • Butabarbital • Butalbital • Mephobarbital	• Pentobarbital • Phenobarbital • Secobarbital
Central nervous system, vasodilators	• Ergot mesylates	• Isoxsuprine
Central nervous system, other	• Thioridazine • Chloral hydrate	• Meprobamate
Endocrine system, estrogens with or without progestins; include only oral and topical patch products	• Conjugated estrogen • Esterified estrogen	• Estradiol • Estropipate
Endocrine system, sulfonylureas, long-duration	• Chlorpropamide	• Glyburide
Endocrine system, other	• Desiccated thyroid	• Megestrol
Gastrointestinal system, other	• Trimethobenzamide	
Pain medications, skeletal muscle relaxants	• Carisoprodol • Chlorzoxazone • Cyclobenzaprine	• Metaxalone • Methocarbamol • Orphenadrine
Pain medications, other	• Indomethacin • Ketorolac, includes parenteral	• Meperidine • Pentazocine

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015. Combination drugs will be added to Table DAE-A with the release of the NDC list.*

Table DAE-B: High-Risk Medications With Days Supply Criteria

Description	Prescription		Days Supply Criteria
Anti-infectives, other	• Nitrofurantoin • Nitrofurantoin macrocrystals	• Nitrofurantoin macrocrystals-monohydrate	>90 days
Nonbenzodiazepine hypnotics	• Eszopiclone • Zaleplon	• Zolpidem	>90 days

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Table DAE-C: High-Risk Medications With Average Daily Dose Criteria

Description	Prescription	Average Daily Dose Criteria
Alpha agonists, central	• Reserpine	>0.1 mg/day
Cardiovascular, other	• Digoxin	>0.125 mg/day
Tertiary TCAs (as single agent or as part of combination products)	• Doxepin	>6 mg/day

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table DAE-3: Data Elements for Use of High-Risk Medications in the Elderly

	Administrative
Measurement year	Y
Data collection method (Administrative)	Y
Eligible population	Y
Numerator events by administrative data	*For each of the 2 rates*
Numerator events by supplemental data	*For each of the 2 rates*
Reported rate	*For each of the 2 rates*
Lower 95% confidence interval	*For each of the 2 rates*
Upper 95% confidence interval	*For each of the 2 rates*

Osteoporosis Management in Women Who Had a Fracture (OMW)

Summary of Changes to HEDIS 2016

- Defined "active prescription."
- Revised the method and value sets to identify acute and nonacute inpatient events for steps 1 and 2 of the event/diagnosis.
- Clarified when to use admission or discharge dates when determining Negative Diagnosis History.
- Clarified that bone mineral density tests that occur in an inpatient setting (either during an inpatient IESD or during the 180-day (6-month) period after the IESD) meet numerator criteria.
- Added long-acting osteoporosis therapy administered during an inpatient IESD to the numerator.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of women 67–85 years of age who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat osteoporosis in the six months after the fracture.

Definitions

Intake Period — A 12-month (1 year) window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year. The Intake Period is used to capture the first fracture.

IESD — Index Episode Start Date. The earliest date of service for any encounter during the Intake Period with a diagnosis of fracture.

For an outpatient or ED visit, the IESD is date of service.

For an inpatient encounter, the IESD is the date of discharge.

For direct transfers, the IESD is the discharge date from the last admission.

Negative Diagnosis History — A period of 60 days (2 months) prior to the IESD when the member had no diagnosis of fracture.

For fractures requiring an inpatient stay, use the date of admission to determine Negative Diagnosis History.

For direct transfers, use the first admission to determine the Negative Diagnosis History.

Active prescription — A prescription is considered active if the "days supply" indicated on the date the member filled the prescription is the number of days or more between that date and the relevant service date.

Eligible Population

Product line Medicare.

Age Women 67–85 years as of December 31 of the measurement year.

Continuous enrollment 12 months (1 year) before the IESD through 180 days (6 months) after the IESD.

Allowable gap No more than one gap in enrollment of up to 45 days during the continuous enrollment period.

Anchor date IESD.

Benefits Medical and pharmacy.

Event/ diagnosis The earliest fracture during the Intake Period.

Follow the steps below to identify the eligible population.

Step 1 Identify all members who had either of the following during the Intake Period.

- An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set), for a fracture (Fractures Value Set).
- An acute or nonacute inpatient discharge for a fracture (Fractures Value Set).
  To identify acute and nonacute inpatient discharges:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Identify the discharge date for the stay.

If the member had more than one fracture, include only the first fracture.

Step 2 Test for Negative Diagnosis History. Exclude members who had either of the following during the 60-day (2 months) period prior to the IESD.

- An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) for a fracture (Fractures Value Set).
- An acute or nonacute inpatient discharge for a fracture (Fractures Value Set). To identify acute and nonacute inpatient discharges:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Identify the discharge date for the stay.

For an acute or nonacute inpatient IESD, use the IESD date of admission to determine the 60-day period.

For direct transfers, use the first admission to determine the Negative Diagnosis History.

Step 3 Calculate continuous enrollment. Members must be continuously enrolled during the 12 months prior to the fracture through 180 days (6 months) post-fracture.

Step 4: Required exclusions Exclude members who met any of the following criteria:

- Members who had a BMD test (Bone Mineral Density Tests Value Set) during the 730 days (24 months) prior to the IESD.
- Members who had a claim/encounter for osteoporosis therapy (Osteoporosis Medications Value Set) during the 365 days (12 months) prior to the IESD.
- Members who received a dispensed prescription or had an active prescription to treat osteoporosis (Table OMW-C) during the 365 days (12 months) prior to the IESD.

For an acute or nonacute inpatient IESD, use the IESD date of admission to determine the number of days prior to the IESD.

Administrative Specification

Denominator The eligible population.

Numerator Appropriate testing or treatment for osteoporosis after the fracture defined by any of the following criteria:

- A BMD test (Bone Mineral Density Tests Value Set), in any setting, on the IESD or in the 180-day (6-month) period after the IESD.
- If the IESD was an inpatient stay, a BMD test (Bone Mineral Density Tests Value Set) during the inpatient stay.
- Osteoporosis therapy (Osteoporosis Medications Value Set) on the IESD or in the 180-day (6-month) period after the IESD.
- If the IESD was an inpatient stay, long-acting osteoporosis therapy (Long-Acting Osteoporosis Medications Value Set) during the inpatient stay.
- A dispensed prescription to treat osteoporosis (Table OMW-C) on the IESD or in the 180-day (6-month) period after the IESD.

Table OMW-C: Osteoporosis Therapies

Description	Prescription	
Biphosphonates	• Alendronate • Alendronate-cholecalciferol • Ibandronate	• Risedronate • Zoledronic acid
Other agents	• Calcitonin • Denosumab	• Raloxifene • Teriparatide

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Note

- *Fractures of finger, toe, face and skull are not included in this measure*
-

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table OMW-3: Data Elements for Osteoporosis Management in Women Who Had a Fracture

	Administrative
Measurement year	Y
Data collection methodology (Administrative)	Y
Eligible population	Y
Number of required exclusions	Y
Numerator events by administrative data	Y
Numerator events by supplemental data	Y
Reported rate	Y
Lower 95% confidence interval	Y
Upper 95% confidence interval	Y

Antidepressant Medication Management (AMM)

Summary of Changes to HEDIS 2016

- Added a method and value sets to identify acute and nonacute inpatient discharges for required exclusions (step 2).
- Changed the description of "SSNRI antidepressants" to "SNRI antidepressants" in Table AMM-C.
- Added levomilnacipran to the description of "SNRI antidepressants" in Table AMM-C.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of members 18 years of age and older who were treated with antidepressant medication, had a diagnosis of major depression and who remained on an antidepressant medication treatment. Two rates are reported.

1. *Effective* Acute Phase *Treatment.* The percentage of members who remained on an antidepressant medication for at least 84 days (12 weeks).
2. *Effective Continuation Phase Treatment.* The percentage of members who remained on an antidepressant medication for at least 180 days (6 months).

Definitions

Intake Period	The 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year.
IPSD	Index Prescription Start Date. The earliest prescription dispensing date for an antidepressant medication during the Intake Period.
Negative Medication History	A period of 105 days prior to the IPSD when the member had no pharmacy claims for either new or refill prescriptions for an antidepressant medication.
Treatment days	The actual number of calendar days covered with prescriptions within the specified 180-day (6-month) measurement interval. For Effective Continuation Phase Treatment, a prescription of 90 days (3 months) supply dispensed on the 151st day will have 80 days counted in the 231-day interval.

Eligible Population

Product lines	Commercial, Medicaid, Medicare (report each product line separately).
Ages	18 years and older as of April 30 of the measurement year.
Continuous enrollment	105 days prior to the IPSD through 231 days after the IPSD.

Allowable gap One gap in enrollment of up to 45 days. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Anchor date IPSD.

Benefits Medical and pharmacy.

Event/diagnosis Follow the steps below to identify the eligible population, which is used for both rates.

Step 1 Determine the IPSD. Identify the date of the earliest dispensing event for an antidepressant medication (Table AMM-C) during the Intake Period.

Step 2: Required exclusion Exclude members who did not have a diagnosis of major depression in an inpatient, outpatient, ED, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD. Members who meet any of the following criteria remain in the eligible population:

- An outpatient visit, intensive outpatient encounter or partial hospitalization with any diagnosis of major depression. Either of the following code combinations meets criteria:
  - AMM Stand Alone Visits Value Set ***with*** Major Depression Value Set.
  - AMM Visits Value Set ***with*** AMM POS Value Set ***and*** Major Depression Value Set.
- An ED visit (ED Value Set) with any diagnosis of major depression (Major Depression Value Set).
- An acute or nonacute inpatient discharge with any diagnosis of major depression (Major Depression Value Set). To identify acute and nonacute inpatient discharges:
  1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
  2. Identify the discharge date for the stay.

For a direct transfer, use the discharge date from the last discharge.

Step 3 Test for Negative Medication History. Exclude members who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

Step 4 Calculate continuous enrollment. Members must be continuously enrolled for 105 days prior to the IPSD to 231 days after the IPSD.

Administrative Specification

Denominator The eligible population.

Numerators

Effective* Acute Phase *Treatment At least 84 days (12 weeks) of continuous treatment with antidepressant medication (Table AMM-C) beginning on the IPSD through 114 days after the IPSD (115 total days). Continuous treatment allows gaps in medication treatment up to a total of 30 days during the 115-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Regardless of the number of gaps, there may be no more than 30 gap days. Count any combination of gaps (e.g., two washout gaps of 15 days each, or two washout gaps of 10 days each and one treatment gap of 10 days).

Table AMM-C: Antidepressant Medications

Description	Prescription		
Miscellaneous antidepressants	• Bupropion	• Vilazodone	• Vortioxetine
Monoamine oxidase inhibitors	• Isocarboxazid • Phenelzine	• Selegiline • Tranylcypromine	
Phenylpiperazine antidepressants	• Nefazodone	• Trazodone	
Psychotherapeutic combinations	• Amitriptyline-chlordiazepoxide • Amitriptyline-perphenazine		• Fluoxetine-olanzapine
SNRI antidepressants	• Desvenlafaxine • Duloxetine	• Levomilnacipran • Venlafaxine	
SSRI antidepressants	• Citalopram • Escitalopram	• Fluoxetine • Fluvoxamine	• Paroxetine • Sertraline
Tetracyclic antidepressants	• Maprotiline	• Mirtazapine	
Tricyclic antidepressants	• Amitriptyline • Amoxapine • Clomipramine	• Desipramine • Doxepin (>6 mg) • Imipramine	• Nortriptyline • Protriptyline • Trimipramine

Note: *NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2, 2015.*

Effective Continuation Phase Treatment At least 180 days (6 months) of continuous treatment with antidepressant medication (Table AMM-C) beginning on the IPSD through 231 days after the IPSD (232 total days).

Continuous treatment allows gaps in medication treatment up to a total of 51 days during the 232-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Regardless of the number of gaps, there may be no more than 51 gap days. Count any combination of gaps (e.g., two washout gaps of 25 days each, or two washout gaps of 10 days each and one treatment gap of 10 days).

Note

- *Organizations may have different methods for billing intensive outpatient encounters and partial hospitalizations. Some methods may be comparable to outpatient billing, with separate claims for each date of service; others may be comparable to inpatient billing, with an admission date, a discharge date and units of service. Organizations whose billing methods are comparable to inpatient billing may count each unit of service as an individual visit. The unit of service must have occurred during the period specified.*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table AMM-1/2/3: Data Elements for Antidepressant Medication Management

	Administrative
Measurement year	Y
Data collection methodology (Administrative)	Y
Eligible population	Y
Number of required exclusions	Y
Numerator events by administrative data	*Each of the 2 rates*
Numerator events by supplemental data	*Each of the 2 rates*
Reported rate	*Each of the 2 rates*
Lower 95% confidence interval	*Each of the 2 rates*
Upper 95% confidence interval	*Each of the 2 rates*

Follow-Up After Hospitalization for Mental Illness (FUH)

Summary of Changes to HEDIS 2016

- Added value sets to identify acute inpatient discharges, readmissions and transfer settings for the Event/ diagnosis.
- Added "Numerator events by supplemental data" to the Data Elements for Reporting table to capture the number of members who met numerator criteria using supplemental data.

Description

The percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental illness diagnoses and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner. Two rates are reported:

1. The percentage of discharges for which the member received follow-up within 30 days of discharge.
2. The percentage of discharges for which the member received follow-up within 7 days of discharge.

Eligible Population

Product lines	Commercial, Medicaid, Medicare (report each product line separately).
Ages	6 years and older as of the date of discharge.
Continuous enrollment	Date of discharge through 30 days after discharge.
Allowable gap	No gaps in enrollment.
Anchor date	None.
Benefits	Medical and mental health (inpatient and outpatient).
Event/ diagnosis	An acute inpatient discharge with a principal diagnosis of mental illness (Mental Illness Value Set) on or between January 1 and December 1 of the measurement year. To identify acute inpatient discharges: 1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). 2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set). 3. Identify the discharge date for the stay. The denominator for this measure is based on discharges, not on members. If members have more than one discharge, include all discharges on or between January 1 and December 1 of the measurement year.

Acute readmission or direct transfer

If the discharge is followed by readmission or direct transfer to an *acute inpatient care setting* for a principal mental health diagnosis (Mental Health Diagnosis Value Set) within the 30-day follow-up period, count only the last discharge. Exclude both the initial discharge and the readmission/direct transfer discharge if the last discharge occurs after December 1 of the measurement year.

To identify readmissions to an acute inpatient care setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the admission date for the stay.

Organizations must identify "transfers" using their own methods and then confirm the acute inpatient care setting using the steps above.

Exclusions

Exclude discharges followed by readmission or direct transfer to a nonacute inpatient care setting within the 30-day follow-up period, regardless of principal diagnosis for the readmission. To identify readmissions to a nonacute inpatient care setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Confirm the stay was for nonacute care based on the presence of a nonacute code (Nonacute Inpatient Stay Value Set) on the claim.
3. Identify the admission date for the stay.

Exclude discharges followed by readmission or direct transfer to an acute inpatient care setting within the 30-day follow-up period if the principal diagnosis was for non-mental health (any principal diagnosis code other than those included in the Mental Health Diagnosis Value Set). To identify readmissions to an acute inpatient care setting:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the admission date for the stay.

Organizations must identify "transfers" using their own methods and then confirm the acute inpatient care setting using the steps above.

These discharges are excluded from the measure because rehospitalization or transfer may prevent an outpatient follow-up visit from taking place.

Administrative Specification

Denominator The eligible population.

Numerators

30-Day Follow-Up An outpatient visit, intensive outpatient visit or partial hospitalization with a mental health practitioner within 30 days after discharge. Include outpatient visits, intensive outpatient visits or partial hospitalizations that occur on the date of discharge.

7-Day Follow-Up An outpatient visit, intensive outpatient visit or partial hospitalization with a mental health practitioner within 7 days after discharge. Include outpatient visits, intensive outpatient visits or partial hospitalizations that occur on the date of discharge.

For both indicators, any of the following meet criteria for a follow-up visit:

- A visit (FUH Stand Alone Visits Value Set) with a mental health practitioner.
- A visit (FUH Visits Group 1 Value Set ***and*** FUH POS Group 1 Value Set) with a mental health practitioner.
- A visit (FUH Visits Group 2 Value Set ***and*** FUH POS Group 2 Value Set) with a mental health practitioner.
- A visit in a behavioral healthcare setting (FUH RevCodes Group 1 Value Set).
- A visit in a nonbehavioral healthcare setting (FUH RevCodes Group 2 Value Set) with a mental health practitioner.
- A visit in a nonbehavioral healthcare setting (FUH RevCodes Group 2 Value Set) with a diagnosis of mental illness (Mental Illness Value Set).
- Transitional care management services (TCM 7 Day Value Set), where the date of service on the claim is 29 days after the eligible population event/diagnosis date of discharge.

The following meets criteria for only the 30-Day Follow-Up indicator:

- Transitional care management services (TCM 14 Day Value Set), where the date of service on the claim is 29 days after the event/diagnosis date of discharge.

Note: *Transitional care management is a 30-day period that begins on the date of discharge and continues for the next 29 days. The date of service on the claim is 29 days after discharge and not the date of the face-to-face visit.*

Note

- *Organizations may have different methods for billing intensive outpatient visits and partial hospitalizations. Some methods may be comparable to outpatient billing, with separate claims for each date of service; others may be comparable to inpatient billing, with an admission date, a discharge date and units of service. Organizations whose billing methods are comparable to inpatient billing may count each unit of service as an individual visit. The unit of service must have occurred during the required period for the rate (e.g., within 30 days after discharge or within 7 days after discharge).*
- *Refer to Appendix 3 for the definition of* mental health practitioner*.*

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table FUH-1/2/3: Data Elements for Follow-Up After Hospitalization for Mental Illness

	Administrative
Measurement year	Y
Data collection methodology (Administrative)	Y
Eligible population	Y
Numerator events by administrative data	*Each of the 2 rates*
Numerator events by supplemental data	*Each of the 2 rates*
Reported rate	*Each of the 2 rates*
Lower 95% confidence interval	*Each of the 2 rates*
Upper 95% confidence interval	*Each of the 2 rates*

Board Certification (BCR)

Summary of Changes to HEDIS 2016

- No changes to this measure.

Description

The percentage of the following physicians whose board certification is *active* as of December 31 of the measurement year:

- Family medicine physicians.
- Internal medicine physicians.
- Pediatricians.
- OB/GYN physicians.
- Geriatricians.
- Other physician specialists.

Board certification refers to the various specialty certification programs of the American Board of Medical Specialties and the American Osteopathic Association. Report each product separately as of December 31 of the measurement year.

Product lines Commercial, Medicaid, Medicare (report each product line separately).

Physicians This measure applies to independent physicians or group of physicians who provide care for members.

***Organizations must* include:**

- Physicians who have an independent relationship with the organization. An **independent relationship** exists when an organization selects and directs its members to see a specific physician or group of physicians. An independent relationship is not synonymous with an "independent contract." Physicians may contract with the organization directly or indirectly (e.g., physicians contract with an IPA).
- Physicians who are listed in the organization's directory.
- Physicians who see members outside of the inpatient hospital setting or outside of free-standing facilities.
- Physicians who are hospital based and who see members as a result of their independent relationship with the organization; for example:
  - Anesthesiologists with pain management practices.
  - Hospital-based cardiologists.
  - Hospital-based faculty (who meet the criteria above).

***Organizations must* exclude:**

- Physicians who practice exclusively within the inpatient hospital setting and who provide care for members only as a result of members being directed to the hospital; for example:
  - Pathologists.
  - Radiologists.
  - Anesthesiologists.
  - Hospitalists.
  - Neonatologists.
  - ED physicians.

- Chiropractors.
- Podiatrists.
- Physicians who practice exclusively within free-standing facilities and who provide care for members only as a result of members being directed to the facility; for example:

– Mammography centers.
– Urgent care centers.
– Surgicenters.

- Dentists who do not provide care under the organization's medical benefits; for example:

– Endodontists.
– Oral surgeons.
– Periodontists.

- Dentists who provide primary dental care under a dental plan or rider.

Categories Use Table BCR-A to identify physicians.

Table BCR-A: Identifying Physicians

Product Line	Family Medicine	Internal Medicine	Pediatricians	OB/GYN	Geriatricians	Other Physician Specialists
Commercial	Y	Y	Y	Y	Y	Y
Medicaid	Y	Y	Y	Y	Y	Y
Medicare	Y	Y	Y	Y	Y	Y

Definitions

Family medicine physician A physician who provides preventive and diagnostic health care services for individuals and families. Report general practitioners in the Family Medicine category.

Internal medicine physician A physician who provides long-term and comprehensive care and manages common and complex illness of adolescents, adults and the elderly.

Pediatrician A physician who provides preventive and diagnostic health care services for infants, children and adolescents.

OB/GYN physician A physician who provides medical and surgical care relating to the female reproductive system and associated disorders.

Geriatrician A family medicine or internal medicine physician who has special knowledge of the aging process and special skills in the diagnostic, therapeutic, preventive and rehabilitative aspects of illness in the elderly.

Other physician specialist	Any other physician specialist or physician subspecialist not mentioned above.

Calculation of Board Certification

Number of physicians in each practice area

Refer to Table BCR-1/2/3. For each product line, identify the number of physicians (with active or inactive board certification) in each practice area, by type and number, with whom the organization contracted as of December 31 of the measurement year.

Physicians are assumed to practice in the clinical area or areas in which they are listed in an organization's *internal* directory or classification system. Count physicians listed under more than one category as many times as they are listed, and in each area of practice. For example, count a family medicine physician who also practices as a geriatrician in both the Family Medicine category and the *Geriatrician* category.

Physicians do not have to be listed in the organization's external provider directory to be included in the measure.

Board certification number

Count the number of physicians in each practice area with active board certification. For example, to be reported as a board-certified geriatrician, a physician must have a specialty certification in geriatric medicine.

Count as board certified: A physician with recent board certification who has not completed a residency/fellowship.

Do not count as board certified: A physician for whom there is confirmation by the appropriate certifying body that the physician is eligible for and has applied to a board-certification program.

Board certification percentage

For each type of physician, calculate the percentage whose board certification is active by dividing the board certification number by the number of physicians in each practice area.

First, determine the number of areas of specialization and board certification status for each physician; then determine how to count them in the denominator (i.e., number of physicians in each practice area) and the numerator (i.e., number of active board-certified physicians) of the calculation.

A physician with only one specialty who is not board certified in the specialty counts as 1 in the denominator and 0 in the numerator.

A physician with only one specialty whose board certification is active in the specialty counts as 1 in the denominator and 1 in the numerator.

A physician with more than one specialty counts as 1 in the denominator for each specialty. Count in the numerator the number of specialty areas in which the physician has active board certification.

Example A physician listed under both hematology and medical oncology counts as 2 in the denominator for Other Physician Specialists.

A physician whose board certification is active in both hematology and medical oncology counts as 2 in the numerator.

A physician whose board certification is active in only one of these two areas counts as 1 in the numerator.

A physician whose board certification is not active in either area counts as 0 in the numerator.

Note

- *The physician definitions for this measure are based on the American Board of Medical Specialties (ABMS) definitions for physician specialties.*
- *The numbers in the column "Number of Physicians in Each Practice Area" might not be the same as the organization's actual number of physicians because some physicians might practice in more than one area and will be counted in the denominators of several percentages.*
- *Reporting in the "Pediatrician" category is expected to be rare for the Medicare product line.*

Table BCR-1/2/3: Board Certification

Type of Physician	Number of Physicians in Each Practice Area	Active Board Certification	
		Number	Percentage
Family medicine	_____	_____	_____
Internal medicine	_____	_____	_____
Pediatrician	_____	_____	_____
OB/GYN	_____	_____	_____
Geriatrician	_____	_____	_____
Other physician specialist	_____	_____	_____

Plan All-Cause Readmissions (PCR)

Summary of Changes to HEDIS 2016

- Added a method and value sets to identify acute inpatient discharges in step 1 of the event/diagnosis.
- Added instructions for identifying the transfer setting in step 2 of the event/diagnosis.
- Added a Note to steps 4 and 5 of the event/diagnosis.
- Added a method and value sets to identify acute inpatient admissions in step 1 of the numerator.

Description

For members 18 years of age and older, the number of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission. Data are reported in the following categories:

1. Count of Index Hospital Stays (IHS) (denominator).
2. Count of 30-Day Readmissions (numerator).
3. Average Adjusted Probability of Readmission.

Note: *For commercial, report only members 18–64 years of age.*

Definitions

IHS	Index hospital stay. An acute inpatient stay with a discharge on or between January 1 and December 1 of the measurement year. Exclude stays that meet the exclusion criteria in the denominator section.
Index Admission Date	The IHS admission date.
Index Discharge Date	The IHS discharge date. The index discharge date must occur on or between January 1 and December 1 of the measurement year.
Index Readmission Stay	An acute inpatient stay for any diagnosis with an admission date within 30 days of a previous Index Discharge Date.
Index Readmission Date	The admission date associated with the Index Readmission Stay.
Planned Hospital Stay	A hospital stay is considered planned if it meets criteria as described in step 5 (required exclusions) of the *Eligible Population*.
Classification Period	365 days prior to and including an Index Discharge Date.

Risk Adjustment Tables

Table	Table Description
HCC-Surg	Surgery codes for Risk Adjustment Determination
PCR-DischCC	Discharge Clinical Condition category codes for Risk Adjustment Determination
CC-Comorbid	Comorbid Clinical Condition category codes for Risk Adjustment Determination step 2
HCC–Rank	HCC rankings for Risk Adjustment Determination step 3
HCC-Comb	Combination HCCs for Risk Adjustment Determination step 5
PCR-MA-DischCC-Weight-Under65	MA and SNP primary discharge weights for Risk Adjustment Weighting step 2 for ages under 65
PCR-MA-DischCC-Weight-65plus	MA and SNP primary discharge weights for Risk Adjustment Weighting step 2 for ages 65 and older
PCR-Comm-DischCC-Weight	Commercial primary discharge weights for Risk Adjustment Weighting step 2
PCR-MA-ComorbHCC-Weight-Under65	MA and SNP comorbidity weights for Risk Adjustment Weighting step 3 for ages under 65
PCR-MA-ComorbHCC-Weight-65plus	MA and SNP comorbidity weights for Risk Adjustment Weighting step 3 for ages 65 and older
PCR-Comm-ComorbHCC-Weight	Commercial comorbidity weights for Risk Adjustment Weighting step 3
PCR-MA-OtherWeights-Under65	MA and SNP base risk, surgery, age and gender weights for Risk Adjustment Weighting steps 1, 4, 5 for ages under 65
PCR-MA-OtherWeights-65plus	MA and SNP base risk, surgery, age and gender weights for Risk Adjustment Weighting steps 1, 4, 5 for ages 65 and older
PCR-Comm-OtherWeights	Commercial base risk, surgery, age and gender weights for Risk Adjustment Weighting steps 1, 4, 5

Note: *The risk adjustment tables will be released on November 2, 2015, and posted to www.ncqa.org.*

Eligible Population

Product line	Commercial, Medicare (report each product line separately).
Ages	For commercial, ages 18–64 as of the Index Discharge Date. For Medicare, ages 18 and older as of the Index Discharge Date.
Continuous enrollment	365 days prior to the Index Discharge Date through 30 days after the Index Discharge Date.
Allowable gap	No more than one gap in enrollment of up to 45 days during the 365 days prior to the Index Discharge Date and no gap during the 30 days following the Index Discharge date.
Anchor date	Index Discharge Date.
Benefit	Medical.

Event/ diagnosis

An acute inpatient discharge on or between January 1 and December 1 of the measurement year.

The denominator for this measure is based on discharges, not members. Include all acute inpatient discharges for members who had one or more discharges on or between January 1 and December 1 of the measurement year.

Follow the steps below to identify acute inpatient stays.

Administrative Specification

Denominator

The eligible population.

Step 1

Identify all acute inpatient discharges on or between January 1 and December 1 of the measurement year. To identify acute inpatient discharges:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the discharge date for the stay.

The measure includes acute discharges from any type of facility (including behavioral healthcare facilities).

Step 2

Acute-to-acute transfers: Keep the original admission date as the Index Admission Date, but use the transfer's discharge date as the Index Discharge Date. Organizations must identify "transfers" using their own methods and then confirm the acute inpatient care setting using the process in step 1.

Step 3

Exclude hospital stays where the Index Admission Date is the same as the Index Discharge Date.

Step 4: Required exclusions

Exclude hospital stays for the following reasons:

- The member died during the stay.
- A principal diagnosis of pregnancy (Pregnancy Value Set).
- A principal diagnosis of a condition originating in the perinatal period (Perinatal Conditions Value Set).

Note: *For hospital stays where there was an acute-to-acute transfer (identified in step 2), use both the original stay and the transfer stay to identify exclusions in this step.*

Step 5: Required exclusions

For all acute inpatient discharges identified using steps 1–4, determine if there was a planned hospital stay within 30 days. To identify planned hospital stays, identify all acute inpatient discharges on or between January 1 and December 31 of the measurement year:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the admission date for the stay.

4. Exclude any hospital stay as an Index Hospital Stay if the admission date of the ***first*** stay within 30 days meets any of the following criteria:
   - A principal diagnosis of maintenance chemotherapy (Chemotherapy Value Set).
   - A principal diagnosis of rehabilitation (Rehabilitation Value Set).
   - An organ transplant (Kidney Transplant Value Set, Bone Marrow Transplant Value Set, Organ Transplant Other Than Kidney Value Set).
   - A potentially planned procedure (Potentially Planned Procedures Value Set) without a principal acute diagnosis (Acute Condition Value Set).

Note: *For hospital stays where there was an acute-to-acute transfer (identified in step 2), use only the original stay to identify planned hospital stays in this step (i.e., do not use diagnoses and procedures from the transfer stay).*

Example 1 For a member with the following acute inpatient stays, exclude stay 1 as an Index Hospital Stay.

- *Stay 1 (January 30–February 1 of the measurement year)*: Acute inpatient discharge with a principal diagnosis of COPD.
- *Stay 2 (February 5–7 of the measurement year)*: Acute inpatient discharge with a principal diagnosis of maintenance chemotherapy.

Example 2 For a member with the following acute inpatient stays, exclude stays 2 and 3 as Index Hospital Stays in the following scenario.

- *Stay 1 (January 15–17 of the measurement year):* Acute inpatient discharge with a principal diagnosis of diabetes
- *Stay 2 (January 30–February 1 of the measurement year):* Acute inpatient discharge with a principal diagnosis of COPD.
- *Stay 3 (February 5–7 of the measurement year):* Acute inpatient discharge with an organ transplant.
- *Stay 4 (February 10–15 of the measurement year):* Acute inpatient discharge with a principal diagnosis of rehabilitation.

Step 6 Calculate continuous enrollment.

Step 7 Assign each acute inpatient stay to an age category. Refer to Table PCR-A-2/3 and Table PCR-B-3.

Risk Adjustment Determination

For each IHS, use the following steps to identify risk adjustment categories based on presence of surgeries, discharge condition, comorbidity, age and gender.

Surgeries Determine if the member underwent surgery during the inpatient stay. Download the list of codes from the NCQA Web site (Table HCC-Surg) and use it to identify surgeries. Consider an IHS to include a surgery if at least one procedure code in Table HCC-Surg is present from any provider between the admission and discharge dates.

Discharge Condition Assign a discharge Clinical Condition (CC) category code to the IHS based on its primary discharge diagnosis, using Table PCR-DischCC. For acute-to-acute transfers, use the transfer's primary discharge diagnosis.

Exclude diagnoses that cannot be mapped to Table PCR-DischCC.

Comorbidities

Step 1 Identify all diagnoses for encounters during the classification period. Include the following when identifying encounters:

- Outpatient visits (Outpatient Value Set).
- Observation visits (Observation Value Set).
- Nonacute inpatient encounters (Nonacute Inpatient Value Set).
- Acute inpatient encounters (Acute Inpatient Value Set).
- ED visits (ED Value Set).

Exclude the primary discharge diagnosis on the IHS.

Step 2 Assign each diagnosis to one comorbid Clinical Condition (CC) category using Table CC—Comorbid.

Exclude all diagnoses that cannot be assigned to a comorbid CC category. For members with no qualifying diagnoses from face-to-face encounters, skip to the Risk Adjustment Weighting section.

All digits must match exactly when mapping diagnosis codes to the comorbid CCs.

Step 3 Determine HCCs for each comorbid CC identified. Refer to Table HCC—Rank.

For each stay's comorbid CC list, match the comorbid CC code to the comorbid CC code in the table, and assign:

- The ranking group.
- The rank.
- The HCC.

For comorbid CCs that do not match to Table HCC—Rank, use the comorbid CC as the HCC and assign a rank of 1.

Note: *One comorbid CC can map to multiple HCCs; each HCC can have one or more comorbid CCs.*

Step 4 Assess each ranking group separately and select only the highest ranked HCC in each ranking group using the *Rank* column (1 is the highest rank possible).

Drop all other HCCs in each ranking group, and de-duplicate the HCC list if necessary.

Example *Assume a stay with the following comorbid CCs*: CC-15, CC-19 and CC-80 (assume no other CCs).

- CC-80 does not have a map to the ranking table and becomes HCC-80.
- HCC-15 is part of Ranking Group 1 and HCC-19 is part of Ranking Groups Diabetes 1–Diabetes 4. Because CC-15 is ranked higher than CC-19 in Ranking Group Diabetes 1, the comorbidity is assigned as HCC-15 for Ranking Group 1. Because CC-19 is ranked higher in Ranking Groups Diabetes 2–4, the comorbidity is assigned as HCC-19 for these ranking groups.
- The final comorbidities for this discharge are HCC-15, HCC-19 and HCC-80.

Example: Table HCC—Rank

Ranking Group	CC	Description	Rank	HCC
NA	CC-80	Congestive Heart Failure	NA	HCC-80
Diabetes 1	CC-15	Diabetes With Renal or Peripheral Circulatory Manifestation	1	HCC-15
	CC-16	Diabetes With Neurologic or Other Specified Manifestation	2	HCC-16
	CC-17	Diabetes With Acute Complications	3	HCC-17
	CC-18	Diabetes With Ophthalmologic or Unspecified Manifestation	4	HCC-18
	CC-19	Diabetes Without Complications	5	HCC-19
Diabetes 2	CC-16	Diabetes With Neurologic or Other Specified Manifestation	1	HCC-16
	CC-17	Diabetes With Acute Complications	2	HCC-17
	CC-18	Diabetes With Ophthalmologic or Unspecified Manifestation	3	HCC-18
	CC-19	Diabetes Without Complication	4	HCC-19
Diabetes 3	CC-17	Diabetes With Acute Complications	1	HCC-17
	CC-18	Diabetes With Ophthalmologic or Unspecified Manifestation	2	HCC-18
	CC-19	Diabetes Without Complication	3	HCC-19
Diabetes 4	CC-18	Diabetes With Ophthalmologic or Unspecified Manifestation	1	HCC-18
	CC-19	Diabetes Without Complication	2	HCC-19

Step 5 Identify combination HCCs listed in Table HCC—Comb.

Some combinations suggest a greater amount of risk when observed together. For example, when diabetes *and* CHF are present, an increased amount of risk is evident. Additional HCCs are selected to account for these relationships.

Compare each stay's list of unique HCCs to those in the *HCC* column in Table HCC—Comb and assign any additional HCC conditions.

For fully nested combinations (e.g., the diabetes/CHF combination is nested in the diabetes/ CHF/renal combination), use only the more comprehensive pattern. In this example, only the diabetes/CHF/renal combination is counted.

For overlapping combinations (e.g., the CHF, COPD combination overlaps the CHR/renal/ diabetes combination), use both sets of combinations. In this example, both CHF/COPD and CHF/renal/diabetes combinations are counted.

Based on the combinations, a member can have none, one or more of these added HCCs.

Example For a stay with comorbidities HCC-15, HCC-19 and HCC-80 (assume no other HCCs), assign HCC-901 in addition to HCC-15, HCC-19 and HCC-80. This *does not* replace HCC-15, HCC-19 or HCC-80.

Example: Table HCC—Comb

Combination: Diabetes and CHF			
Comorbid HCC	Comorbid HCC	Comorbid HCC	Combination HCC
HCC-15	HCC-80	NA	HCC-901
HCC-16	HCC-80	NA	HCC-901
HCC-17	HCC-80	NA	HCC-901
HCC-18	HCC-80	NA	HCC-901
HCC-19	HCC-80	NA	HCC-901

Risk Adjustment Weighting

For each IHS, use the following steps to identify risk adjustment weights based on presence of surgeries, discharge condition, comorbidity, age and gender.

Note: *The final weights table will be released on November 2, 2015.*

Step 1 For each IHS with a surgery, link the surgery weight.

- *For Medicare product lines ages 18–64:* Use Table PCR-MA-OtherWeights-Under65.
- *For Medicare product lines ages 65 and older:* Use Table PCR-MA-OtherWeights-65plus.
- *For commercial product lines:* Use Table PCR-Comm-OtherWeights.

Step 2 For each IHS with a discharge CC Category, link the primary discharge weights.

- *For Medicare product lines ages 18–64:* Use Table PCR-MA-DischCC-Weight-Under65.
- *For Medicare product lines ages 65 and older:* Use Table PCR-MA-DischCC-Weight-65plus.
- *For commercial product lines:* Use Table PCR-Comm-DischCC-Weight.

Step 3 For each IHS with a comorbidity HCC Category, link the weights.

- *For Medicare product lines ages 18–64:* Use Table PCR-MA-ComorbHCC-Weight-Under65.
- *For Medicare product lines ages 65 and older:* Use Table PCR-MA-ComorbHCC-Weight-65plus.
- *For commercial product lines:* Use Table PCR-Comm-ComorbHCC-Weight.

Step 4 Link the age and gender weights for each IHS.

- *For Medicare product lines ages 18–64:* Use Table PCR-MA-OtherWeights-Under65.
- *For Medicare product lines ages 65 and older:* Use Table PCR-MA-OtherWeights-65plus.
- *For commercial product lines:* Use Table PCR-Comm-OtherWeights.

Step 5 Identify the base risk weight.

- *For Medicare product lines ages 18–64:* Use Table PCR-MA-OtherWeights-Under65.
- *For Medicare product lines ages 65 and older:* Use Table PCR-MA-OtherWeights-65plus.
- *For commercial product lines:* Use Table PCR-Comm-OtherWeights to determine the base risk weight.

Step 6 Sum all weights associated with the IHS (i.e., presence of surgery, primary discharge diagnosis, comorbidities, age, gender and base risk weight).

Step 7 Use the formula below to calculate the adjusted probability of a readmission based on the sum of the weights for each IHS.

$$\text{Adjusted probability of readmission} = \frac{e^{(\sum \text{WeightsForIHS})}}{1+e^{(\sum \text{WeightsForIHS})}}$$

OR

Adjusted probability of readmission = [exp (sum of weights for IHS)]/[1 + exp (sum of weights for IHS)]

Note: *"Exp" refers to the exponential or antilog function.*

Step 8 Use the formula below and the adjusted probability of readmission calculated in step 7 to calculate the variance for each IHS.

Variance = Adjusted probability of readmission x (1—Adjusted probability of readmission)

Example: If the adjusted probability of readmission is 0.1518450741 for an IHS, then the variance for this IHS is 0.1518450741 x 0.8481549259 = 0.1287881476.

Note: *The variance is calculated at the IHS level. Organizations must sum the variances for each age/gender and total category when populating the Total Variance cells in the reporting tables.*

Sample Table: PCR—Risk Adjustment Weighting

Member ID*	Admiss. Counter	Base Risk Weight	Age	Gender	Age and Gender Weight	Surgical Weight	ICD-9 Diagnosis Code	Discharge CC		HCC-PCR		Sum of Weights	Adjusted Probability	Variance
								Category	Weight	Category	Weight			
1250	1	-1.08883	67	Female	0.1000	-0.2800	250.4	15	0.0700	20	0.1400	-0.8600	0.2976	0.2090
										25	0.2000			
4010	1	-1.08883	50.00	Male	0.1200	NA	007.4	5	0.0300	NA	NA	-0.9400	0.2811	0.2021
4010	2	-1.08883	50.00	Male	0.1200	NA	298.00	77	0.0600	5	0.0100	-0.5700	0.3615	0.2308
										47	0.3300			

*Each Member ID field with a value represents a unique IHS.

Numerator At least one acute readmission for any diagnosis within 30 days of the Index Discharge Date.

Step 1 Identify all acute inpatient stays with an admission date on or between January 2 and December 31 of the measurement year. To identify acute inpatient admissions:

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set).
3. Identify the admission date for the stay.

Step 2 ***Acute-to-acute transfers:*** Keep the original admission date as the Index Admission Date, but use the transfer's discharge date as the Index Discharge Date. Organizations must identify "transfers" using their own methods and then confirm the acute inpatient care setting using the steps above.

Step 3 Exclude acute inpatient hospital discharges with a principal diagnosis of pregnancy (Pregnancy Value Set) or a principal diagnosis for a condition originating in the perinatal period (Perinatal Conditions Value Set).

Step 4 For each IHS, determine if any of the acute inpatient stays have an admission date within 30 days after the Index Discharge Date.

Reporting: Denominator

Count the number of IHS for each age and enter these values into the reporting table.

Reporting: Risk Adjustment

Step 1 Calculate the average adjusted probability for each IHS for each age and the overall total.

Organizations must calculate the probability of readmission for each hospital stay within the applicable age group to calculate the average (which is reported to NCQA). For the total age category, the probability of readmission for all hospital stays in the age categories must be averaged together; organizations cannot take the average of the average adjusted probabilities reported for each age.

Step 2 Round to four decimal places using the .5 rule and enter these values into the reporting table.

Note: *Do not take the average of the cells in the reporting table.*

Example For the "18–44" age category:

- Identify all IHS by 18–44 year-old males and calculate the average adjusted probability.
- Identify all IHS by 18–44 year-old females and calculate the average adjusted probability.
- Identify all IHS by all 18–44 year-olds and calculate the average adjusted probability.

Repeat for each subsequent group.

Step 3 Calculate the total (sum) variance for each age and the overall total.

Step 4 Round to four decimal places using the .5 rule and enter these values into the reporting table.

Reporting: Numerator

Count the number of IHS with a readmission within 30 days for each age and enter these values into the reporting table.

Note

- *Organizations may not use Risk Assessment Protocols to supplement diagnoses for calculation of the risk adjustment scores for this measure. The PCR measurement model was developed and tested using only claims-based diagnoses and diagnoses from additional data sources would affect the validity of the models as they are current implemented in the specification.*

Table PCR-A-2/3: Plan All-Cause Readmissions Rates by Age and Risk Adjustment

Age	Count of Index Stays (Denominator)	Count of 30-Day Readmissions (Numerator)	Observed Readmissions (Num/Den)	Average Adjusted Probability	Total Variance	O/E Ratio (Observed Readmissions/Average Adjusted Probability)	Lower Confidence Interval (O/E Ratio)	Upper Confidence Interval (O/E Ratio)
18-44	_____	_____	_____	_____	_____	_____	_____	_____
45-54	_____	_____	_____	_____	_____	_____	_____	_____
55-64	_____	_____	_____	_____	_____	_____	_____	_____
Total	_____	_____	_____	_____	_____	_____	_____	_____

Table PCR-B-3: Plan All-Cause Readmissions Rates by Age and Risk Adjustment

Age	Count of Index Stays (Denominator)	Count of 30-Day Readmissions (Numerator)	Observed Readmissions (Num/Den)	Average Adjusted Probability	Total Variance	O/E Ratio (Observed Readmissions/Average Adjusted Probability)	Lower Confidence Interval (O/E Ratio)	Upper Confidence Interval (O/E Ratio)
65-74	_____	_____	_____	_____	_____	_____	_____	_____
75-84	_____	_____	_____	_____	_____	_____	_____	_____
85+	_____	_____	_____	_____	_____	_____	_____	_____
Total	_____	_____	_____	_____	_____	_____	_____	_____