Diamond Designation™ Program

Program Year 2022



METHODOLOGY WHITE PAPER

Introduction

Overview

The Diamond Designation™ Program (the "Program") evaluates both the quality ("Quality") and cost efficiency ("Cost Efficiency") of care within select specialty areas. Quality is emphasized over Cost Efficiency in the Program evaluation. The methodology used in the evaluation of Quality and Cost Efficiency is based on national standards adopted by many other major health plans. The primary purpose of the Diamond Designation™ Program is to assist primary care providers in making more informed decisions for specialty care referrals.

Evaluations are conducted annually using updated, more contemporary data. Results are based on the evaluation of services rendered within a three-year period (the "Evaluation Period"). For Program Year 2022, the Evaluation Period is January 2018 through December 2020.

For Program Year 2022, evaluations focus exclusively on 12 specialty types, listed in Table 1 below. Individual providers in these specialty types ("Specialists") are attributed to their practice groups ("Specialist Groups"). A Specialist Group is defined as a group of Specialists with common specialty taxonomies within a tax identification number ("TIN"). Quality and Cost Efficiency results are determined at a Specialist Group level. Specialty is defined by the category of the providers' primary taxonomy as listed in the National Plan and Provider Enumeration System (NPPES) National Provider Registry. See Appendix 1 for the full list of evaluated taxonomy codes.

Table 1: Current Specialty Types

Specialty Types				
✓ Cardiology*	✓ Gastroenterology	✓ Neurology*	✓ Psychiatry	
✓ Counseling	✓ General Surgery	✓ Orthopedic Surgery	✓ Psychology	
✓ Endocrinology*	✓ Nephrology*	✓ Podiatry	✓ Pulmonology	

^{*}Evaluation of providers excludes care of pediatric members (<18 years of age).

The Program evaluates both Medicare and Medicaid providers in certain geographies that participate in our networks. Availability across geography is dependent upon several factors, including: the size of the specialty care network; the adequacy of claims volume; the distinguishability of specialty care performance within given areas; and the extent of interest by primary care providers. See Appendix 2 for Program availability details across different states.

Data and Limitations

Evaluations for both Quality and Cost Efficiency rely on health plan claims data. Members and their associated claims are excluded from evaluations when there is either: 1.) a lack of adequate health plan enrollment during necessary timeframes; 2.) a different health plan or payer that is known to be the primary payer; or 3.) a partial or limited benefit coverage only (e.g. only behavioral health coverage).

The Diamond Designation™ Program has certain limitations, including the following:

- Quality and Cost Efficiency evaluations are based only on Wellcare members and claims, and do not include information on outcomes for members of non-Wellcare health plans. In many cases, a Specialist Group's total patient panel has health coverage across many different health plans and payers.
- Wellcare was recently acquired by Centene, and certain legacy Wellcare provider networks have since migrated to the Centene business. For Program Year 2022, evaluations from the Diamond Designation™ Program are limited to providers who are part of the legacy Wellcare provider network. See Appendix 2 for more details on the specific networks evaluated by state.
- Program quality measures do not measure the quality of all possible types of services provided within each specialty.

 Only Specialist Groups who provide enough services for the Program's specific quality measures can be evaluated.
- Wellcare does not receive data for every encounter or every prescription filled. Some encounters and/or claims
 are billed independently or are paid by members directly, other health plans, the Veterans Administration, or other
 third parties. The Program does exclude members and their associated claims from evaluation when a different
 payer is primary.
- Some claims are aggregated when submitted for adjudication. Sometimes the cost attributed to each service within these claims may be distributed proportionally based on the claim's total cost.
- It is not feasible to evaluate some geographic areas due to an inadequate volume of claims and/or an insufficient number of different Specialist Groups within a given specialty type. Similarly, some Specialist Groups are unable to be assessed due to limited member and/or claim volume.

Special Considerations for COVID-19

The 2022 Program Year methodology makes special adjustments to address changes in healthcare treatment patterns and outcomes due to the COVID-19 global pandemic.

Our assessment of Cost Efficiency and Quality outcomes indicated certain differences between pre-pandemic versus post-pandemic timeframes. For the evaluation of Cost Efficiency, the methodology defines a national start of the COVID-19 pandemic period ("COVID Period") as 4/1/2020. Episodes that end before the COVID Period are not compared to episodes beginning within the COVID Period. Episodes that start before the COVID Period and end during the COVID Period have been excluded from evaluation.

For the evaluation of Quality, expected compliance rates have been calculated for 2020 and are used to specifically score Quality for measurements occurring during 2020. Additionally, two quality scores have been computed for providers: one using all three years of the evaluation period and one without 2020 measurements, with the better score applied. However, if the score without 2020 measurements drops the sample size below the minimum sample size requirement, then the three-year score will be utilized.

The methodology has further been adjusted for direct diagnoses of COVID-19 and excludes both episodes and quality measurements for any member who simultaneously had a confirmed case using diagnostic codes available on claims detail.

Quality Measurement

Overview

Quality evaluation consists of specialty specific, outcome-based measurement with some process-based measurements. Measures were primarily derived from those endorsed by national organizations such as:

- The National Quality Forum (NQF)
- The National Committee for Quality Assurance (NCQA)
- The Centers for Medicare and Medicaid Services (CMS)

Quality measurements are attributed to Specialist Groups using measure-specific attribution logic appropriate for the type of measure. Each Specialist Group is evaluated by calculating a Quality Index ("QI") score, which compares actual non-compliance to risk-adjusted expected non-compliance.

Quality Measurement Requirements

- Each measure has its own enrollment requirements for member evaluation. When members do not meet the enrollment requirements, the measurement is excluded.
- Members must have a Chronic Disease & Illness Payment System (CDPS) score available to use relative to the defined measure timeframe in order for the measurement to be included.
- Specific adjustments to Quality evaluation have been applied to address the impacts of COVID-19. See Special Considerations for COVID-19 on page 2 for details.

Provider Attribution

Measurements can be attributed to Specialist Groups using either event-based or longitudinal attribution.

Event Attribution – A Specialist Group is attributed to a measurement based on a service they provided that triggers an anchor event. Anchor events initiate a measure's measurement period. Examples of anchor events include procedure dates, diagnosis dates, and medication fill dates.

There are two types of event-based provider attribution:

- Diagnosing Provider: Attributed when a diagnosis is made by the provider triggering a measurement anchor event
- Servicing Provider: Attributed when a procedure is performed by the provider triggering a measurement anchor event

Longitudinal Attribution – Longitudinal attribution is used for certain quality measures with calendar year measurement periods. Longitudinal attribution assigns a member to a Specialist Group within a calendar year when both of the following are true:

- The member has at least three separate encounters with the Specialist Group where the Specialist Group provided an outpatient Evaluation & Management (E&M) service within the measurement period.
- The member has more outpatient E&M encounters with the Specialist Group than the member did with any other Specialist Group of the same specialty during the measurement period.

Measures

Quality evaluation leverages distinct measures (Table 2) attributable to providers within the specialty types included for Program Year 2022. A given measure can be used across more than one specialty type.

Table 2: List of Quality Measures

Measure Name	Measure Source	Applicable Specialty	Link to Detail
Heart Failure Admission Rate in Patients Previously Diagnosed with Heart Failure	AHRQ	Cardiology	Link to detail
30-Day Cardiovascular-Related Readmission Rate Post-Acute Myocardial Infarction (AMI) Discharge	CMS	Cardiology	Link to detail
30-Day Cardiovascular-Related Readmission Rate Post-Heart Failure (HF) Discharge	CMS	Cardiology	Link to detail
Cardiac Catheterization Complications	American College of Cardiology	Cardiology	Link to detail
Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy	American Heart Association	Cardiology	Link to detail
Statin Therapy for Patients with Cardiovascular Disease (SPC)	NCQA	Cardiology Endocrinology Nephrology	Link to detail
Statin Therapy for Patients with Diabetes (SPD)	NCQA	Cardiology Endocrinology Nephrology	Link to detail
Diabetes Long-Term Complications Admission Rate	AHRQ	Endocrinology	Link to detail
Diabetes Short-Term Complications ED Visit Rate	AHRQ	Endocrinology	Link to detail
Hepatitis C: Screening for Hepatocellular Carcinoma (HCC) in Patients with Cirrhosis	American Gastroenterological Association	Gastroenterology	Link to detail
7-Day Hospital Visit Rate after Outpatient Colonoscopy	CMS	Gastroenterology	Link to detail

Measure Name	Measure Source	Applicable Specialty	Link to Detail
Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid-Related Iatrogenic Injury Bone Loss Assessment	American Gastrological Institute	Gastroenterology	Link to detail
7-Day Hospital Visit Rate after ERCP Procedure	CAB*	Gastroenterology	Link to detail
Laparoscopic Cholecystectomy Complications	CAB*	General Surgery	Link to detail
7-Day Hospital Visit Rate after Appendectomy	CAB*	General Surgery	Link to detail
Harmonized Procedure Specific Surgical Site Infection (SSI)	American College of Surgeons	General Surgery	Link to detail
All Cause Inpatient Admission Rate for Hemodialysis Patients	CMS	Nephrology	Link to detail
Bloodstream Infection in Hemodialysis Patients	CDC	Nephrology	Link to detail
Chronic Kidney Disease (CKD)-Related ED Visits in Patients with CKD	CAB*	Nephrology	Link to detail
ESRD Patients having an Avoidable Inpatient Admission	CMS	Nephrology	Link to detail
Epileptic Patients having Multiple Epilepsy ED Visits	CAB*	Neurology	Link to detail
Patients Previously Diagnosed with Chronic Headaches having Multiple Headache-Related ED Visits	CAB*	Neurology	Link to detail
Epileptic Patients having an Epilepsy- Related Inpatient Admission	CAB*	Neurology	Link to detail
Knee Arthroscopy Complications	CAB*	Orthopedic Surgery	Link to detail
Total Hip Arthroplasty (THA) Complications	CMS	Orthopedic Surgery	Link to detail
Total Knee Arthroplasty (TKA) Complications	CMS	Orthopedic Surgery	Link to detail

Measure Name	Measure Source	Applicable Specialty	Link to Detail
Lumbar Spine Fusion Complications	CAB*	Orthopedic Surgery	Link to detail
Diabetic Patients having a Diabetic Foot- Related ED Visit	CAB*	Podiatry	Link to detail
Diabetic Patients having a Diabetic Foot- Related Inpatient Admission	CAB*	Podiatry	Link to detail
Bunionectomy Redos	CAB*	Podiatry	Link to detail
Use of Pharmacotherapy for Opioid Use Disorder (OUD)	CMS	Psychiatry	Link to detail
Continuity of Pharmacotherapy for Opioid Use Disorder (OUD)	University of Southern California	Psychiatry	Link to detail
Patients Previously Diagnosed with a Mental Health Disorder having a Mental Health or Substance Abuse-Related ED Visit	CAB*	Psychiatry Psychology Counseling	Link to detail
Patients Previously Diagnosed with Substance Abuse having a Mental Health or Substance Abuse-Related ED Visit	CAB*	Psychiatry Psychology Counseling	Link to detail
Patients Previously Diagnosed with Self Harm or Suicide Attempt having a Mental Health or Substance Abuse-Related ED Visit	CAB*	Psychiatry Psychology Counseling	Link to detail
Patients Previously Diagnosed with Major Depressive Disorder having a Depression- Related Acute Hospital Admission	CAB*	Psychiatry Psychology Counseling	Link to detail
Antidepressant Medication Management (AMM)	NCQA	Psychiatry	Link to detail
Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM)	NCQA	Psychiatry	Link to detail
Initiation of Alcohol and Other Drug Abuse or Dependence Treatment (IET)	NCQA	Psychiatry	Link to detail

Measure Name	Measure Source	Applicable Specialty	Link to Detail
Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET)	NCQA	Psychiatry	Link to detail
Adherence to Antipsychotic Medications for Individuals with Schizophrenia (SAA)	CMS	Psychiatry	Link to detail
30-Day COPD-Related Readmission Post-COPD Discharge	AHRQ	Pulmonology	Link to detail
Patients Age 18-65 Previously Diagnosed with Asthma having an Asthma-Related ED Visit	CAB*	Pulmonology	Link to detail
Pharmacotherapy Management of COPD Exacerbation (Bronchodilators) (PCE)	NCQA	Pulmonology	Link to detail
Pharmacotherapy Management of COPD Exacerbation (Systemic Corticosteroids) (PCE)	NCQA	Pulmonology	Link to detail

^{*}CAB = Clinical Advisory Boards; measures developed with our Program's internal Clinical Advisory Boards based on published literature and/or specialty specific societies

AHRQ = Agency for Healthcare Research and Quality

CMS = Centers for Medicare and Medicaid Services

CDC = Centers for Disease Control

NCQA = National Committee for Quality Assurance

NQF = National Quality Forum

ED = Emergency Department

COPD = Chronic Obstructive Pulmonary Disease

Minimum Requirements

To be evaluated for Quality, a Specialist Group's attributed quality measurements must be derived from at least 20 unique members.

Measurement Risk Adjustment

Certain differences in the Specialist Group's mix of attributed members potentially affect the expected measurement results. Therefore, adjustments are applied to Quality evaluation within the Program methodology.

For each measure within a specialty type, an expected rate of non-compliance is calculated as the rate of noncompliance for measurements within a distinct quality adjustment cohort. Quality adjustment cohorts represent members in the same line of business (Medicaid or Medicare) and in the same member burden of disease level.

Dual-eligible members who are covered by the health plan under both Medicare and Medicaid are grouped into the Medicare line of business.

Member Burden of Disease Level

Member burden of disease level is based on the CDPS algorithm, which risk adjusts for member factors including age, sex, and both behavioral and clinical comorbidities. For each measurement, the respective member's CDPS score is binned into one of five levels (none, low, moderate, high, and very high). Members who have a score of very high have multiple chronic conditions that typically require more intensive management. Cut points for each CDPS bin are different for Medicare versus Medicaid and are based on the observed distribution of scores within each line of business.

Calculation of Expected Rate of Non-Compliance

The observed non-compliant rate across all measurements for a given measure within a given specialty type for members of the same quality adjustment cohort is determined. Those non-compliant rates are the expected rates of non-compliance.

Table 3: Example Expected Rates of Non-Compliance

Specialty	Measure	Quality Adjustment Cohort	Expected Rate of Non-Compliance
Orthopedic Surgery	TKA Complication Rate	MCD NONE	0.0559
Orthopedic Surgery	TKA Complication Rate	MCD LOW	0.0610
Orthopedic Surgery	TKA Complication Rate	MCD MOD	0.0726
Orthopedic Surgery	TKA Complication Rate	MCD HIGH	0.0962
Orthopedic Surgery	TKA Complication Rate	MCD VERY HIGH	0.2037
Orthopedic Surgery	TKA Complication Rate	MCR NONE	0.0317
Orthopedic Surgery	TKA Complication Rate	MCR LOW	0.0392
Orthopedic Surgery	TKA Complication Rate	MCR MOD	0.0478
Orthopedic Surgery	TKA Complication Rate	MCR HIGH	0.0515
Orthopedic Surgery	TKA Complication Rate	MCR VERY HIGH	0.1563
Orthopedic Surgery	THA Complication Rate	MCD NONE	0.0494
Orthopedic Surgery	THA Complication Rate	MCD LOW	0.0540
Orthopedic Surgery	THA Complication Rate	MCD MOD	0.0898
Orthopedic Surgery	THA Complication Rate	MCD HIGH	0.1073
Orthopedic Surgery	THA Complication Rate	MCD VERY HIGH	0.2500
Orthopedic Surgery	THA Complication Rate	MCR NONE	0.0300
Orthopedic Surgery	THA Complication Rate	MCR LOW	0.0508
Orthopedic Surgery	THA Complication Rate	MCR MOD	0.0744
Orthopedic Surgery	THA Complication Rate	MCR HIGH	0.1322

Orthopedic Surgery THA Complication Rate MCR VERY HIGH 0.1666	Orthopedic Surgery THA	Complication Rate	MCR VERY HIGH	0.1666
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MCD = Medicaid

MCR = Medicare

NONE, LOW, MOD, HIGH, VERY HIGH = Member burden of disease level

TKA = total knee arthroscopy

THA = total hip arthroscopy

Comparison of Actual to Expected

For each Specialist Group, the Quality Index is calculated by dividing total actual non-compliant measurements by the total of the expected non-compliant measurements. A lower QI score indicates better quality results.

$$\frac{\sum actual \ non-compliant}{\sum expected \ non-compliant} = Quality \ Index \ (QI)$$

Example Quality Index Calculation

Specialist Group: ABC Orthopedic Surgery Group

Specialty: Orthopedic Surgery

Table 4: Quality Index Calculation Example for Example Specialist Group

Cohort	Measure	Quality Adjustment Cohort	Total Measurements	Expected Rate of Non- Compliance	Total Expected Non- Compliant Outcomes	Total Actual Non- Compliant Outcomes
1	TKA Complications	MCD LOW	1	0.0610	0.0610	0
2	TKA Complications	MCR MOD	6	0.0478	0.2868	0
3	TKA Complications	MCR LOW	2	0.0392	0.0784	0
4	TKA Complications	MCD HIGH	1	0.0962	0.0962	1
5	TKA Complications	MCR MOD	4	0.0478	0.1912	0
6	THA Complications	MCR LOW	6	0.0508	0.3048	0
	•				1.0184	1

1 = non-compliant outcome occurred

0 = non-compliant outcome did not occur

MCD = Medicaid

MCR = Medicare

LOW, MOD, HIGH = Member burden of disease level

TKA = total knee arthroscopy

THA = total hip arthroscopy

Note: This is only an example and a minimum of 20 measurements for 20 distinct members would be required for Specialist Group inclusion in Program Quality evaluation.

In this example, ABC Orthopedic Surgery Group's Quality Index score of 0.9819 would result by dividing the sum of actual non-compliant outcomes (1) by the expected sum of non-compliant outcomes (1.0184).

$$\frac{\sum actual \ non-compliant}{\sum expected \ non-compliant} = \frac{1}{1.0184} = 0.9819 = Quality \ Index \ (QI)$$

Quality Designation Benchmarks

Each Specialist Groups' QI score is compared to all other evaluable Specialist Groups of the same specialty type. QI scores are then converted to percentiles.

Within each specialty, the QI score of the provider at the 40th percentile is determined and set as the Quality designation benchmark. For each Specialist Group, a chi-square goodness of fit test is applied to determine if a Specialist Group's QI score is not statistically worse than this Quality designation benchmark with 90% confidence. The highest percentile the group can statistically receive is described as the adjusted percentile. Specialist Groups with an adjusted percentile at the 40th percentile or higher receive the Diamond Designation™ indication as shown in Table 5. Specialist Groups who are not evaluated on Quality are listed as "not evaluated" in display results.

We collaborate in value-based care arrangements with some providers to improve healthcare outcomes for our members. Such providers agree to be evaluated based on these arrangements. Specialist Groups with affiliations to such providers can be considered for Diamond Designation $^{\text{TM}}$. The Specialist Groups must practice in one of the included specialty types evaluated under the Program and have attributed Wellcare members in their patient panel.

Table 5. Quality Results

Quality Designation Display	Description
	Meets or exceeds Quality designation benchmark Meets Criteria
	Below Quality designation benchmark Does Not Meet Criteria
Not Evaluated	Not evaluated for one or more reasons including sample size limitations

Cost Efficiency

Overview

Specialist Groups are measured for Cost Efficiency using industry standard episodes of care evaluation. Episodes of care are built using the IBM Watson Health™ Medical Episode Grouper (MEG).

The actual cost of attributed episodes is compared to the expected cost that generates a Cost Efficiency Index ("CEI") core for each Specialist Group. Expected costs are determined after adjustments for risk and case mix.

Episode Qualification Requirements

- Episodes must be flagged as a qualified episode according to IBM Watson Health™ MEG qualification rules. Qualified episodes have enough claim sufficiency and encounter detail to be used for evaluation.
- The allowed amount for the episode must be greater than \$50 and less than \$1 million.
- Cancer-related episodes and those where death is known to have occurred during the episode are excluded from evaluation.
- There must be at least 100 occurrences of an episode within a given cost efficiency adjustment cohort, which is determined by the combination of: episode group, episode severity, member burden of disease level, member line of business (Medicare or Medicaid), and geographic area (state). When a cost efficiency adjustment cohort has at least 100 episodes, the episodes in that cohort are considered comparable episodes and can be utilized in evaluation of Cost Efficiency.
- Episodes that include more than one administrative (non-claim) encounters are excluded because the service value of the encounter cannot be reliably determined with potential to artificially deflate the cost of the associated episode.
- Members must have a CDPS score available to use relative to the episode timeframe in order for the episode to be included in evaluation.
- Any chronic episodes, which are assessed in annualized periods, with less than 10 months of member enrollment are excluded.

- Acute episodes are excluded when the member: 1.) was not enrolled from the episode start date to the episode end date; 2.) was not enrolled during the pre-episode clean period; or 3.) was not enrolled during the post-episode clean periods. Clean periods are windows of time around episodes that help ensure that the actual beginning and/ or end dates are accurately identified, often by establishing the absence of a condition.
- Specific adjustments to Cost Efficiency evaluation have been applied to address the impacts of COVID-19. See Special Considerations for COVID-19 on page 2 for details.

Provider Attribution

A Specialist Group is identified as the managing specialist group for the episode if:

- The episode is clinically appropriate to assign to the specialty type of the Specialist Group. The Diamond
 Designation™ Program internal Clinical Advisory Boards determine the appropriate mapping of episode groups to
 the 14 evaluated specialty types.
- The Specialist Group provided more outpatient E&M services than any other Specialist Group in any specialty
 evaluated. Ties are broken by greatest number of unique encounters, then by the highest total allowed amount
 from services provided.

While the Program does not evaluate individual Specialists independently, an individual Specialist is identified as the managing specialist for the episode if they:

- Are a specialist with a primary taxonomy included in evaluation (Appendix 1);
- · Are a part of the managing specialist group; and
- Provided more outpatient E&M services than any other Specialist within the managing specialist group, with ties broken by greatest number of unique encounters, then by highest total allowed amount from services provided.

Mid-level provider (nurse practitioner, physician assistant, etc.) services are included as and assumed part of the specialty care provided by the Specialist Group if there is at least one E&M service from a physician Specialist in the same TIN as the mid-level during the episode. The mid-level visits are included in determining the attribution of the managing Specialist Group described above. However, mid-level providers cannot be attributed to episodes directly as a managing Specialist.

Minimum Requirements

In order to be included for Cost Efficiency evaluation, a Specialist Group must be the managing specialist group for at least 20 comparable episodes after outliers have been removed.

Episode Risk Adjustment

The Program methodology provides adjustments for factors that can potentially affect expected episode cost in assessing provider Cost Efficiency.

Each episode is grouped into a cost efficiency adjustment cohort of the same geography (state), member line of business (Medicare or Medicaid), member burden of disease level, episode group, and episode severity. Dual eligible members covered by the health plan under both Medicare and Medicaid are grouped into the Medicare line of business.

Member Burden of Disease Level

Member burden of disease level is based on the CDPS algorithm, which adjusts for risk based on member factors including age, gender, and both behavioral and clinical comorbidities. Members are grouped into one of five bins based on the member's CDPS score at the start of the episode: none, low, moderate, high, and very high. The CDPS bin sizes vary for each line of business. Members who have a score of very high have multiple chronic conditions that typically require more intensive management. Cut points for each CDPS bin are different for Medicare versus Medicaid and are based on the observed distribution of scores within each line of business.

Episode Group

The MEG software groups medical and pharmacy claim lines into distinct episodes that fall into any of over 580 different condition-based episode groups.

Episode Severity

To address differing severity of episodes the Program leverages IBM Watson Health™ Disease Staging that assigns severity level on a scale of 0-3 based on the progression or extent of the condition.

Table 6: Episode Severity Level Descriptions

Severity Level	Description
0	No active disease
1	Conditions with no complications or problems of minimal severity
2	Problems limited to an organ system; significantly increased risk of complications
3	Multiple site involvement; generalized systemic involvement, poor prognosis

Outlier Methodology & Comparison of Actual to Expected

As previously noted, episodes of extremely low and high amounts are excluded. Before calculating expected costs, other outlier episodes are removed to improve reliability of Cost Efficiency evaluation. Cost distributions within the cost efficiency adjustment cohorts are largely non-parametric. As such, a modified robust z test is utilized to determine high cost outliers.

The robust z test is stronger at identifying outliers than the standard z test in non-normal distributions because it relies on the median for calculating the z score. It is less influenced by outliers when compared to the standard z score. The modified z score is calculated from the median absolute deviation. These values must be multiplied by a constant to approximate the standard deviation.

A robust z score is calculated for each episode within a cost efficiency adjustment cohort. Episodes with robust z scores greater than 5.00 (equivalent to standard deviations) are considered outliers. After these additional high cost outliers are removed, the average of the remaining episodes within each cost efficiency adjustment cohort is determined. This average is assigned as the expected cost for each cost efficiency adjustment cohort.

Table 7: Example Cost Efficiency Adjustment Cohort Actual and Expected Cost

Episode ID	Cost Efficiency Adjustment Cohort	Actual Episode Cost	Expected Episode Cost
ABC-3678	FL-MCR-306-3-LOW	\$600	\$750
ABC-3679	FL-MCR-306-3-LOW	\$700	\$750
ABC-3680	FL-MCR-306-3-LOW	\$900	\$750
ABC-3681	FL-MCR-306-3-LOW	\$800	\$750

In the example above, the FL-MCR-306-3-LOW cohort represents the cost efficiency adjustment cohort where the member is enrolled in the Florida (FL) Medicare (MCR) line of business with an episode group of hypertension (306), episode severity level of 3 (3), and a member burden of disease level of low (LOW).

The Cost Efficiency Index is determined from the sum of all actual episode costs for the Specialist Group divided by the sum of all corresponding expected episode costs. A lower CEI score indicates better Cost Efficiency.

Table 8: CEI Calculation Example for Example Specialist Group

Episode ID	Episode Cost Adjustment Cohort ID	Actual Episode Cost	Expected Episode Cost	
ABC-3678	FL-MCR-306-3-LOW	\$600	\$750	
ABC-3679	FL-MCR-249-1-MOD	\$1,400	\$1,200	
ABC-3680	FL-MCR-306-3-LOW	\$900	\$750	
ABC-3681	FL-MCR-299-2-LOW	\$1,500	\$1,800	
Sum of Actual Episode Cost	t:	\$4,400		
divided by				
Sum of Expected Episode C	Cost:		\$4,500	·
Cost Efficiency Index:				0.98

FL= Florida

MCR = Medicare

306, 249, 299 = Episode group number

3, 1, 2 = Episode severity

LOW, MOD = Member burden of disease level

Note: This is only an example and a minimum of 20 comparable episodes for a Specialist Group would be required for inclusion in Program Cost Efficiency evaluation.

Cost Efficiency Benchmarks

The CEI of each Specialist Group is converted to a percentile. A chi-square goodness of fit test is utilized to identify the highest percentile the group could achieve statistically with 90% confidence. The highest percentile the Specialist Group can statistically receive is described as the adjusted percentile.

Specialist Groups with an adjusted percentile in the following ranges achieve the corresponding Cost Efficiency star rating. However, the Cost Efficiency rating <u>is only displayed</u> in Program reporting to primary care providers for Specialist Groups that receive the Diamond Designation™ for Quality. Specialist Groups that are not evaluated on Cost Efficiency are listed as "not evaluated" in display results.

Table 9. Cost Efficiency Results

Cost Efficiency Display*	Adjusted Percentile
****	0 - 9
****	10 - 19
****	20 - 44
****	45 - 69
****	70 – 99
Not Evaluated	Not evaluated for one or more reasons including sample size limitations

^{*}Note: Specialist Groups who do not receive the Diamond Designation $^{\text{TM}}$ for Quality will not have a Cost Efficiency star rating displayed in reporting to primary care providers. The Program emphasizes Quality results over Cost Efficiency.

Important Notes about the Diamond Designation™ Program

The Diamond Designation™ Program aims to assist primary care providers in making more informed decisions for specialty care referrals based on standard methods in evaluating quality and cost efficiency. Quality is emphasized over cost efficiency in the evaluation process. Primary care providers are informed that determinations from the Program should not serve as the sole basis for specialist provider selection. We evaluate specialty provider quality and cost efficiency for innetwork providers at a practice group level based on tax identification number. The current Program evaluates 12 specialty types: cardiology, counseling, endocrinology, gastroenterology, general surgery, nephrology, neurology, orthopedic surgery, podiatry, psychology, and pulmonology.

Information from the Diamond Designation™ Program is not an endorsement of any provider or their delivery of care. Physicians are solely responsible for evaluating the needs of our members and directing them to the most appropriate healthcare services. The Diamond Designation™ Program does not certify the quality of care nor the cost efficiency of care that members receive from evaluated providers. Determinations from the Diamond Designation™ Program are only a partial evaluation of cost efficiency and quality and should not solely serve as the basis for specialist provider selection. Participating specialists are not agents of Wellcare and are solely responsible for the treatment and outcomes of their patients. Physicians participating in our networks have met specific minimum credentialing requirements. Wellcare members continue to have access to all physicians in our network according to their benefit plan and in no way are limited to certain providers based on evaluations under this program.

The Diamond Designation™ Program methodology for evaluation is based on national standards and incorporates feedback from physicians and other clinicians. Although there is risk of error in evaluations, Wellcare aims to produce evaluation results that are as accurate as possible. Specialty provider groups evaluated within the Program may request a change or correction to information used to determine their cost efficiency or quality scores. The absence of any quality or cost efficiency determination should not be construed to suggest that a provider does not provide quality or efficient healthcare services. Reasons a provider may not have a determination available for quality or cost efficiency include but are not limited to: 1) they practice in a specialty that is not evaluated by the Diamond Designation™Program; or 2) there is insufficient data to meet minimum sample size requirements for statistical evaluation.

For the 2022 program year, research was performed to identify and address COVID-19 impacts to evaluation results. The methodology used to evaluate specialists within the Diamond Designation™ Program is subject to change from year to year.

The information contained in this Methodology White Paper document is subject to change.



Have questions or feedback for us?

Please contact **DiamondDesignation@Wellcare.com**

For more information on methodology or other Program details please visit **www.Wellcare.com/Providers/Medicare/Diamond-Designation-Program**

Wellcare offers a range of Medicare products, including Medicare Advantage and Medicare Prescription Drug Plans. Wellcare is also affiliated with local plans dedicated to serving Medicaid members in NJ, HI, and KY. The information presented here is representative of our network of products. If you have any questions regarding the different health plans within a state, please contact your dedicated Provider Relations representative.

Appendix 1

Applicable Taxonomy Codes and Names

Specialty	Taxonomy Code	Taxonomy Name
Cardiology	207RC0001X	Internal Medicine, Clinical Cardiac Electrophysiology
Cardiology	207RH0005X	Internal Medicine, Hypertension Specialist
Cardiology	207RI0011X	Internal Medicine, Interventional Cardiology
Cardiology	207RC0000X	Internal Medicine, Cardiovascular Disease
Counseling	101Y00000X	Counselor
Counseling	101YA0400X	Counselor, Addiction
Counseling	101YM0800X	Counselor, Mental Health
Counseling	101YP2500X	Counselor, Professional
Counseling	102L00000X	Counselor, Psychoanalyst
Counseling	222Q00000X	Developmental Therapist
Counseling	225CA2500X	Rehab Counselor, Assistive Technology Supplier
Counseling	225CX0006X	Rehab Counselor, Orientation/Mobility Training
Counseling	225C00000X	Rehabilitation Counselor
Counseling	225CA2400X	Rehab Counselor, Assistive Technology Practitioner
Counseling	104100000X	Social Worker
Counseling	1041C0700X	Social Worker, Clinical
Endocrinology	207RE0101X	Internal Medicine, Endocrine, Diabetes, Metabolism
Gastroenterology	207RG0100X	Internal Medicine, Gastroenterology
Surgery (General Surgery)	208600000X	Surgery
Nephrology	207RN0300X	Internal Medicine, Nephrology
Neurology	2084B0040X	Psychiatry/Neurology, Behavioral Neurology
Neurology	2084P0005X	Psychiatry/Neurology, Neurodevelopmental Disability
Neurology	2084P2900X	Psychiatry/Neurology, Pain Medicine
Neurology	2084S0010X	Psychiatry/Neurology, Sports Medicine
Neurology	2084S0012X	Psychiatry/Neurology, Sleep Medicine
Neurology	2084V0102X	Psychiatry/Neurology, Vascular Neurology
Neurology	2084N0400X	Allopath/Osteopath, Neurology
Neurology	2084N0600X	Psychiatry/Neurology, Clinical Neurophysiology
Orthopedic Surgery	207X00000X	Orthopedic Surgery
Orthopedic Surgery	207XX0005X	Orthopedic Surgery, Sports Medicine
Orthopedic Surgery	207XX0801X	Orthopedic Surgery, Orthopedic Trauma
Orthopedic Surgery	207XS0114X	Orthopedic Surgery, Adult Reconstructive Surgery

Specialty	Taxonomy Code	Taxonomy Name
Orthopedic Surgery	207XS0117X	Orthopedic Surgery, Orthopedic Surgery of Spine
Orthopedic Surgery	207XX0004X	Orthopedic Surgery, Foot/Ankle Orthopedics
Podiatry	213E00000X	Podiatrist
Podiatry	213EG0000X	Podiatrist, General Practice
Podiatry	213EP0504X	Podiatrist, Preventive Medicine, Public Health
Podiatry	213EP1101X	Podiatrist, Primary Podiatric Medicine
Podiatry	213ER0200X	Podiatrist, Radiology
Podiatry	213ES0000X	Podiatrist, Sports Medicine
Podiatry	213ES0103X	Podiatrist, Surgery, Foot/Ankle
Podiatry	213ES0131X	Podiatrist, Surgery, Foot
Psychiatry	2084B0002X	Psychiatry/Neurology, Bariatric Medicine
Psychiatry	2084D0003X	Psychiatry/Neurology, Diagnostic Neuroimaging
Psychiatry	2084P0015X	Psychiatry/Neurology, Psychosomatic Medicine
Psychiatry	2084P0800X	Psychiatry/Neurology, Psychiatry
Psychiatry	2084A0401X	Psychiatry/Neurology, Addiction Medicine
Psychiatry	2084P0802X	Psychiatry/Neurology, Addiction Psychiatry
Psychiatry	2084P0804X	Psychiatry/Neurology, Child/Adolescent Psychiatry
Psychiatry	2084P0805X	Psychiatry/Neurology, Geriatric Psychiatry
Psychiatry	2084F0202X	Psychiatry/Neurology, Forensic Psychiatry
Psychiatry	2084H0002X	Psychiatry/Neurology, Hospice/Palliative Medicine
Psychology	103TA0400X	Psychologist, Addiction
Psychology	103TA0700X	Psychologist, Adult Development and Aging
Psychology	103TB0200X	Psychologist, Cognitive and Behavioral
Psychology	103TC0700X	Psychologist, Clinical
Psychology	103TC1900X	Psychologist, Counseling
Psychology	103TH0100X	Psychologist, Health Service
Psychology	103TM1700X	Psychologist, Men and Masculinity
Psychology	103TM1800X	Psychologist, Mental Retardation and Development Disabilities
Psychology	103TP0016X	Psychologist, Prescribing (Medical)
Psychology	103TP0814X	Psychologist, Psychoanalysis
Psychology	103TP2700X	Psychologist, Psychotherapy
Psychology	103TP2701X	Psychologist, Psychotherapy, Group
Psychology	103G00000X	Neuropsychologist
Psychology	103GC0700X	Neuropsychologist, Clinical

Specialty	Taxonomy Code	Taxonomy Name
Psychology	103K00000X	Behavioral Analyst
Psychology	103T00000X	Psychologist
Psychology	103TC2200X	Psychologist, Clinical Child and Adolescent
Psychology	103TE1000X	Psychologist, Educational
Psychology	103TF0000X	Psychologist, Family
Psychology	103TF0200X	Psychologist, Forensic
Psychology	103TH0004X	Psychologist, Health
Psychology	103TR0400X	Psychologist, Rehabilitation
Psychology	103TW0100X	Psychologist, Women
Pulmonology	207RP1001X	Internal Medicine, Pulmonary Disease

Appendix 2

Availability of Diamond Designation $^{\text{TM}}$ Program Evaluations

State and Line of Business Availability	Geographic Availability
Connecticut - Medicare	Statewide
Florida - Medicare*	Statewide
Georgia - Medicare*	Limited to urban areas including counties of Baldwin, Bibb, Camden, Carroll, Chatham, Cherokee, Clarke, Clayton, Cobb, Columbia, Coweta, Dekalb, Fayette, Forsyth, Fulton, Glynn, Greene, Gwinnett, Henry, Houston, McDuffie, Muscogee, Newton, Paulding, Pickens, Richmond, Rockdale, Spalding, Troup, Walton, and Wayne
Hawaii - Medicare and Medicaid	Statewide
Kentucky - Medicare and Medicaid	Limited to major urban areas including Louisville and surrounding area, Lexington and surrounding area, as well as counties in northern Kentucky
Maine - Medicare	Statewide except for Aroostook county
New Jersey - Medicare and Medicaid	Limited to northern counties except for Hunterdon
Tennessee - Medicare	Statewide

^{*} Evaluations may also include Medicaid member cases for Medicare providers who were also participating in Wellcare Medicaid networks during the evaluation period

Note: Not all specialty types are evaluated in each state for reasons including: the relative size of the specialty care network; the adequacy of claims volume; the distinguishability of specialty care performance; and the extent of interest by primary care providers.

Appendix 3

Quality Measure Detail

Specialty Quality Measure

Heart Failure Admission Rate in Patients Previously Diagnosed with Heart Failure

Measure Steward Applicable Specialties Member Age Range
AHRQ Cardiology 18-90 yrs

Description

Measures the number of patients that had at least one cardiovascular-related inpatient hospital stay during the measure year in patients previously diagnosed with heart failure

Rationale

As a chronic disease, heart failure is one of the most common reasons for hospitalization in older adults. Decreasing these readmissions has the potential to simultaneously lower costs and improve quality, and therefore has become an important measure for health plans. The goal of this measure is to improve the quality of care inpatients with heart failure. Additionally, this patient outcome measure helps to improve cardiovascular aspects of care by investigating how patients, plans, and provider practices can work together more effectively to prevent avoidable hospitalizations for members with heart failure.



30-Day Cardiovascular-Related Readmission Rate Post Acute Myocardial Infarction (AMI) Discharge

Measure Steward Applicable Specialties Member Age Range
CMS Cardiology 18-90 yrs

Description

Measures 30-day cardiovascular-related readmission rate for patients discharged from the hospital with a principal diagnosis of acute myocardial infarction (AMI) on the index admission

Rationale

Readmission for Acute Myocardial Infarction (AMI) significantly contributes to preventable morbidity and healthcare costs. The goal of this measure is to improve patient outcomes by providing patients, physicians, and health plans with information about specialty provider-level readmission rates following hospitalization for AMI. Measurement of patient outcomes allows for a broad view of quality of care that encompasses more than what can be captured by individual process-of-care measures. Hospital readmissions for AMI depend more on compound relations between patient and provider rather than on clinical severity of illness alone.



30 Day Cardiovascular-Related Readmission Rate Post Heart Failure (HF) Discharge

Measure Steward Applicable Specialties Member Age Range
CMS Cardiology 18-90 yrs

Description

Measures 30-day cardiovascular-related readmission rate for patients discharged from the hospital with principal diagnosis of Heart Failure (HF) on the index admission

Rationale

Heart Failure (HF) is the most common cause of hospitalization in the US for people older than 65 years of age. It has the highest 30-day re-hospitalization rate among medical and surgical conditions, accounting for up to one-third of the total readmissions. Readmission for Heart Failure significantly contributes to preventable morbidity and healthcare costs. The goal of this measure is to improve patient outcomes by providing patients, physicians, and health plans with information about specialty provider-level readmission rates following hospitalization for HF. Measurement of patient outcomes allows for a broad view of quality of care that encompasses more than what can be captured by individual process-of-care measures.



Cardiac Catheterization Complications

Measure Steward

American College of Cardiology

Applicable Specialties

Cardiology

Member Age Range

18-90 yrs

Description

Measures the rate of patients having a complication (AMI, DVT, embolism, infections and other post cardiac complication) after undergoing a cardiac catheterization procedure

Rationale

Cardiac catheterization is one of the most widely performed cardiac procedures. As expected in any invasive procedure, there is some risk of patient-related and procedure-related complications. The goal of this measure is to focus on the providers rate of complications and subsequent care in comparison with expected complication rates throughout the field. Tracking clinical outcomes up to 30 days post procedure should remain a top priority because it can provide significant insights into the effectiveness of current treatments, and important issues regarding follow-up care and patient satisfaction with the care provided, as well.



Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy

Measure Steward

Applicable Specialties
Cardiology

Member Age Range

18-90 yrs

American Heart Association

Description

Measures adherence to anticoagulant medications for patients previously diagnosed with atrial fibrillation and who filled at least one anticoagulant prescription in the year prior to the measurement year; adherence is defined as at 80% proportion of days covered (PDC) of the measure year

Rationale

Atrial fibrillation (AF) is associated with a 5-fold increase in stroke risk and is the most common cause of ischemic stroke in the elderly. Oral anticoagulation (OAC) reduces the risk of stroke associated with AF by 60%, yet only half of AF patients recommended for OAC receive these medications, and less than half of them adhere to OAC over time. Successful attempts to improve patient adherence depend upon a set of key factors. These include realistic assessment of patients' knowledge and understanding of the regimen and clear and effective communication between provider and their patients. Physician-patient partnerships are essential when choosing amongst various therapeutic options to maximize adherence. Mutual collaboration fosters greater patient satisfaction, reduces the risks of non adherence, and improves patients' healthcare outcomes. Engaging in this quality improvement activity allows anticoagulation providers to assess their own performance and identify areas for targeted interventions.



Statin Therapy for Patients with Cardiovascular Disease (SPC)

Measure Steward

Applicable Specialties

Member Age Range

NCQA

Cardiology Endocrinology Nephrology

21-75 yrs

Description

Measures the number of patients with clinical atherosclerotic cardiovascular disease (ASCVD) who were prescribed a statin medication during the measurement year

Rationale

Cardiovascular disease is the leading cause of death in the United States. It is estimated that 92.1 million American adults have one or more types of cardiovascular disease. People with diabetes also have elevated cardiovascular risk, thought to be due in part to elevations in unhealthy cholesterol levels. Having unhealthy cholesterol levels places people at significant risk for developing ASCVD. Statins are a class of drugs that lower blood cholesterol. American College of Cardiology and American Heart Association (ACC/AHA) guidelines state that statins of moderate or high intensity are recommended for adults with established clinical ASCVD.



Statin Therapy for Patients with Diabetes (SPD)

Measure Steward

Applicable Specialties

Member Age Range

NCQA

Cardiology Endocrinology Nephrology

40-75 yrs

Description

Measures the number of patients with diabetes mellitus who were prescribed a statin medication during the measurement year

Rationale

According to guidelines from the American College of Cardiology (ACC) and the American Heart Association (AHA), lowering LDL-C levels in patients with diabetes helps manage risk factors for atherosclerotic cardiovascular disease (ASCVD). Statins are a class of drugs that lower blood cholesterol. The American Diabetes Association and ACC/AHA guidelines also recommend statins for primary prevention of cardiovascular disease in patients with diabetes, based on age and other risk fa ctors. Guidelines also state that adherence to statins will aid in ASCVD risk reduction in both populations.



Diabetes Long-Term Complications Admission Rate

Measure Steward Applicable Specialties Member Age Range
AHRQ Endocrinology 6-90 yrs

Description

Measures the rate of patients admitted to the hospital with a principal diagnosis of diabetes with long term complications (renal, eye, neurological, circulatory, or complications not otherwise specified) during the measure year in patients previously diagnosed with diabetes prior to the measure year

Rationale

Without access to high quality outpatient diabetes care, certain diabetes conditions can become life-threatening. Long-term diabetes complications arise from sustained long-term poor control of diabetes. These complications may result in costly and avoidable inpatient hospital admissions. Inpatient hospital admissions for these complications can be an indicator that diabetes is not being properly prevented or managed. Additionally, engaging in this quality improvement activity allows diabetes managing providers to assess their own performance and identify areas for targeted interventions.



Diabetes Short-Term Complications ED Visit Rate

Measure Steward Applicable Specialties Member Age Range
AHRQ Endocrinology 6-90 yrs

Description

Measures the rate of patients admitted to the hospital with a principal diagnosis of diabetes short-term complications (ketoacidosis, hyperosmolarity) during the measure year in patients previously diagnosed with diabetes prior to the measure year.

Rationale

Without access to high quality outpatient diabetes care, certain diabetes conditions can become life-threatening. Short-term diabetes complications are thought to arise from short-term and long-term poor control of diabetes. These complications may result in costly and avoidable emergency department visits or inpatient hospital admissions. Emergency department visits for these complications can be an indicator that diabetes is not being properly prevented or managed. The goal of this measure is to fully understand how patient demographics, physician's practice patterns, social determinants, and clinical characteristics are related to the long-term outcome of diabetes treatment. Additionally, engaging in this quality improvement activity allows diabetes managing providers to assess their own performance and identify areas for targeted interventions.



Hepatitis C: Screening for Hepatocellular Carcinoma (HCC) in Patients with Cirrhosis

Measure Steward

Applicable Specialties

Member Age Range

American Gastroenterological Association Gastroenterology

18+ yrs

Description

Measures the rate of patients who underwent imaging with either ultrasound, contrast enhanced CT or MRI for hepatocellular carcinoma (HCC) in patients aged 18yr+ previously diagnosed with chronic hepatitis C and cirrhosis

Rationale

HCC (hepatocellular carcinoma) is the fourth most common cancer in the world and is the fastest rising cause of cancer-related deaths in the United States. HCV is the leading cause of HCC and the risk of developing HCC is highest in patients with established HCV cirrhosis. Patients at high risk for developing HCC, including patients with hepatitis C cirrhosis, should be entered into surveillance programs. Engaging in this preventive care quality improvement activity allows managing providers to assess their own performance and identify areas for targeted process improvements.



7-Day Hospital Visit Rate after Outpatient Colonoscopy

Measure Steward Applicable Specialties Member Age Range
CMS Gastroenterology 65+ yrs

Description

Measures the rate of all-cause unplanned hospital visits (admission & ED) within 7 days of an outpatient colonoscopy

Rationale

This measure will reduce adverse patient outcomes associated with preparation for colonoscopy, it procedure itself, and follow-up care by capturing and making more visible to providers and patients all unplanned hospital visits following the procedure. Engaging in this procedure-based outcome measure allows performing providers to assess their own performance and identify are as for targeted improvement.



Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid-Related Iatrogenic Injury Bone Loss Assessment

Measure Steward

Applicable Specialties

Member Age Range

American

Gastrological Institute

Gastroenterology

18+ yrs

Description

Measures the percentage of patients with inflammatory bowel disease on long term corticosteroid medication (60 days or longer) who had a bone density test during the measure year

Rationale

Patients with inflammatory bowel disease (IBD) often rely on their gastroenterologist for healthcare maintenance. In addition, the gastroenterologist also provides guidance to the patient's primary care physician on a broad range of issues such as osteoporosis screening and cancer/dysplasia surveillance. Furthermore, screening for osteoporosis is one of the major parameters in health maintenance of IBD. This preventative care measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



7-Day Hospital Visit Rate after ERCP

Measure Steward Applicable Specialties Member Age Range
CAB Gastroenterology 18+ yrs

Description

Measures 7-day all cause hospital visits (admission & ED) rate following an ERCP procedure

Rationale

Endoscopic retrograde cholangiopancreatography (ERCP) is the main therapeutic modality for bile duct disease in modern practice. ERCP is a complex procedure associated with the potential for significant adverse events including pancreatitis, perforation, hemorrhage, and infection; despite these risks, ERCP is widely practiced in both tertiary-care as well as in smaller community settings. Post ERCP hospital visit is defined as an unplanned hospital admission or an emergency department visit and has been used as a surrogate for adverse events and measurement of provider performance following endoscopic procedures.



Laparoscopic Cholecystectomy Complications

Measure Steward Applicable Specialties Member Age Range
CAB General Surgery 18-90 yrs

Description

Measures 30-day all cause inpatient admission rate following laparoscopic cholecystectomy procedure

Rationale

Gallstone disease is one of the most common digestive pathologies, and, as a result, cholecystectomy is one of the most frequently performed surgical procedures. Laparoscopic cholecystectomy (LC), one of the most performed cholecystectomy procedures, remains associated with significant major complications including bile leak and bile duct injury (BDI). Unplanned hospital admission or ED visit after this surgery is used as a surrogate for adverse events and measurement of provider performance. This outcome measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



7-Day Hospital Visit Rate after Appendectomy

Measure Steward Applicable Specialties Member Age Range
CAB General Surgery 5-99 yrs

Description

Measures 7-day all cause unplanned hospital visits (admission & ED) rate following an appendectomy

Rationale

Patients presenting with acute appendicitis are usually hospitalized for a few days for appendectomy and postoperative recovery. Hospital utilization following surgery is an important and accepted patient-centered outcome reported in healthcare. National estimates of hospital visit rates following surgery vary based on the type of surgery, outcome measured (admissions alone or admissions and emergency department [ED] visits), and timeframe for measurement after surgery. However, providers (surgeons) are often unaware of their patients hospital visits after surgery since patients often present to the ED or to different hospitals. Therefore, a quality measure of hospital visits following appendectomy can improve transparency, inform patients and providers, and foster quality improvement.



Harmonized Procedure Specific Surgical Site Infection (SSI)

Measure Steward

American College of Surgeons

Applicable Specialties

General Surgery

Member Age Range

18-90 yrs

Description

Measures the rate of 30-day post operative surgical site infections following operations where at least one incision is made through the skin or mucous membrane, or reoperation via an incision that was left open during a prior operative procedure

Rationale

While advances have been made in infection control practices, including improved operating room ventilation, sterilization methods, barriers, surgical technique, and availability of antimicrobial prophylaxis, SSIs remain a substantial cause of morbidity, hospitalization, and death. The goal of this measure is to promote SSI prevention activities which will lead to improved patient outcomes including reduction of avoidable medical costs, and reduction in patient morbidity and mortality.



All Cause Inpatient Admission Rate for Hemodialysis Patients

Measure Steward

Applicable Specialties

Member Age Range

CMS

Nephrology

18-90 yrs

Description

Measures the rate of all-cause inpatient admission among patients receiving hemodialysis

Rationale

Hospitalization among hemodialysis (HD) patients remains a significant healthcare burden and detractor of quality of life. Inpatient admissions of patient on HD are concerning in that they may represent premature discharge, suboptimal care during a period of patient vulnerability, and diminished capacity for enacting self-care. The goal of this measure is to decrease avoidable hospitalization which will lead to improved patient outcomes including reduction of avoidable medical costs, and patient morbidity and mortality.



Bloodstream Infection in Hemodialysis Patients

Measure Steward Applicable Specialties Member Age Range
CDC Nephrology 18-90 yrs

Description

Measures the rate of patients having a bloodstream infection among patients receiving hemodialysis

Rationale

Bloodstream infections are an important cause of hospitalizations, morbidity, and mortality in patients receiving hemodialysis (HD). Eliminating bloodstream infections in the hemodialysis setting has been a focus of the Centers for Disease Control and Prevention (CDC). Infection-related hospitalizations have increased dramatically over the last 10 years in patients receiving in-center hemodialysis. It is vitally important for treating providers to play a key role in developing and implementing infection control measures in the dialysis facilities, because physician leadership is essential in preventing healthcare associated infections. Providers can frequently review infection preventing policies in facilities they work with and make preventative and screening recommendations. The goal of this measure is to reinforce the importance of proper infection control procedures for physicians, nurses, dialysis technicians, and all healthcare workers involved in HD treatments.



Chronic Kidney Disease (CKD)-Related ED Visits in Patients with CKD

Measure Steward Applicable Specialties Member Age Range
CAB Nephrology 18-90 yrs

Description

Measures the rate of patients having a CKD-related ED visit during the measure year in patients previously diagnosed with CKD

Rationale

Emergency department use is high among patients with CKD, although only a small proportion of these encounters is for potentially preventable CKD-related care. The goal of this measure is to improve CKD management by providing patients, physicians, and health plans with information about specialty provider-level chronic disease outcomes. Additionally, engaging in this preventive care quality improvement activity allows managing providers to assess their own performance and identify areas for targeted process improvements.



ESRD Patients having an Avoidable Inpatient Admission

Measure Steward Applicable Specialties Member Age Range
CMS Nephrology 18-90 yrs

Description

Measures the rate of inpatient admissions in patients previously diagnosed with ESRD

Rationale

Hospitalization among ESRD patients remains a significant healthcare burden and detractor of quality of life. Inpatient admissions of patients with ESRD are concerning in that they may represent premature discharge, suboptimal care during a period of patient vulnerability, and diminished capacity for enacting self-care. The goal of this measure is to decrease avoidable hospitalization which will lead to improved patient outcomes including reduction of avoidable medical costs, and patient morbidity and mortality.



Epileptic Patients having Multiple Epilepsy ED Visits

Measure Steward Applicable Specialties Member Age Range
CAB Neurology 18-90 yrs

Description

Measures the rate of patients having 2 or more epilepsy-related ED visits during the measure year in patients previously diagnosed with epilepsy

Rationale

Epilepsy or seizure care is the most common neurologic condition that presents to an emergency department (ED) and accounts for a large number of annual cases. The aim of this measure is to decrease seizure-related ED visits in epileptic patients. One variable known to increase ED utilization is inappropriate dosing of abortive seizure medication. Medication mismanagement may result in costly and avoidable emergency department visits. Emergency department visits for these complications can be an indicator that epilepsy is not being properly prevented or managed.



Patients Previously Diagnosed with Chronic Headaches having Multiple Headache-Related ED Visits

Applicable Specialties	Member Age Range
Neurology	18-90 yrs
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Description

Measures the rate of patients having 2 or more headache-related ED visits during the measure year in patients previously diagnosed with chronic headaches.

Rationale

Headache is noted as one of most common reasons for ED visits. Chronic headache patients may repeatedly use ED services for headache care. Identifying patients who are at high risk of using the ED is important so that providers can reduce ED use for nonurgent care. Headache can be extremely disabling. Correct diagnosis and effective treatment substantially impacts patient quality of life.



Epileptic Patients having an Epilepsy-Related Inpatient Admission

Measure Steward Applicable Specialties Member Age Range
CAB Neurology 18-90 yrs

Description

Measures the rate of patients having an epilepsy-related inpatient admission during the measure year in patients previously diagnosed with epilepsy

Rationale

Seizures are listed as an Ambulatory Care Sensitive Condition (ACSC), but in some cases, hospitalization is required. Patient education, counseling, and seizure management support that targets medication compliance and lifestyle management can reduce avoidable hospitalizations, minimize the cost of care, and maximize health care quality.



Knee Arthroscopy Complications

Measure Steward Applicable Specialties Member Age Range
CAB Orthopedic Surgery 18-90 yrs

Description

Measures the rate of 14-day post knee arthroscopy complications (septic arthritis, and other arthroscopy-related complications)

Rationale

Knee arthroscopy is one of the most common surgical procedures worldwide and the number of arthroscopies has substantially increased in the last 30 years. Knee arthroscopy is widely acknowledged to be a safe procedure. Still, there are known serious complications such as joint infections, thrombosis, embolism and other arthroscopy-related complications. Tracking clinical outcomes post procedure can provide significant insights into the effectiveness of surgical treatment, and important issues regarding follow-up care and patient satisfaction with the care provided.



Total Hip Arthroplasty (THA) Complications

Measure Steward Applicable Specialties Member Age Range
CMS Orthopedic Surgery 18-90 yrs

Description

Measures the rate of THA procedures that result in a THA complication (joint implant complication, DVT, pulmonary embolism, surgical site infection, bone fracture following joint implant, or other intraoperative or postprocedural complication)

Rationale

The goal of this measure is to improve patient outcomes by providing patients, physicians, hospitals, and policy makers with information about Provider-level outcomes following a primary elective THA. THA complication is an outcome that is likely attributable to care processes and is an important outcome for patients. Measuring and reporting complication rates will inform healthcare providers and facilities about opportunities to improve care.



Total Knee Arthroplasty (TKA) Complications

Measure Steward Applicable Specialties Member Age Range
CMS Orthopedic Surgery 18-90 yrs

Description

Measures the rate of TKA procedures that result in a TKA complication (joint implant complication, DVT, pulmonary embolism, surgical site infection, bone fracture following joint implant, or other intraoperative or postprocedural complication)

Rationale

The goal of this measure is to improve patient outcomes by providing patients, physicians, hospitals, and policy makers with information about Provider-level, risk-standardized complication rates (RSCRs) following a primary elective TKA. TKA complication is an outcome that is likely attributable to care processes and is an important outcome for patients. Measuring and reporting complication rates will inform healthcare providers and facilities about opportunities to improve care. In addition, it has the potential to lower health care costs associated with complications.



Lumbar Spine Fusion Complications

Measure Steward Applicable Specialties Member Age Range
CAB Orthopedic Surgery 18-90 yrs

Description

Measures the rate of lumbar spine fusion procedures that result in a lumbar spine fusion complication (device displacement, DVT, or other intraoperative or postprocedural complication)

Rationale

Surgical treatment of adult lumbar spinal disorders is associated with a substantial risk of intraoperative and perioperative complications. The improvement in perioperative management and the development of new techniques in anesthetics and surgical sciences have led to substantial reduction of complications related to lumbar spine surgery. Measuring and reporting complication rates will inform healthcare providers and facilities about opportunities to improve care. In addition, it has the potential to lower health care costs associated with complications.



Diabetic Patients having a Diabetic Foot-Related ED Visit

Measure Steward Applicable Specialties Member Age Range
CAB Podiatry 18-90 yrs

Description

Measures the rate of patients having a diabetic foot-related ED visit during the measure year in patients previously diagnosed with diabetes prior to the measure year.

Rationale

Diabetic foot complications take a substantial clinical and economic toll in acute care settings. Clear opportunities exist to reduce costs and improve outcomes for this systematically neglected condition by establishing effective practice paradigms for screening, prevention, and coordinated care. ED visits for diabetic foot can bean indicator that diabetes screenings are not being properly managed. This measure can identify members with suboptimal podiatry-related preventative care.



Diabetic Patients having a Diabetic Foot-Related Inpatient Admission

Measure Steward Applicable Specialties Member Age Range
CAB Podiatry 18-90 yrs

Description

Measures the rate of patients having a diabetic foot-related inpatient admission during the measure year in patients previously diagnosed with diabetes

Rationale

Diabetic foot complications take a substantial clinical and economic toll in acute care settings. Clear opportunities exist to reduce costs and improve outcomes for this systematically neglected condition by establishing effective practice paradigms for screening, prevention, and coordinated care. Acute hospital visits for diabetic foot can be an indicator that diabetes screenings are not being properly managed. This measure can identify members with suboptimal podiatry-related preventative care.



Bunionectomy Redos

Measure Steward Applicable Specialties Member Age Range
CAB Podiatry 18-90 yrs

Description

Measures the percentage of bunionectomies that result in a redo procedure within 365 days following the index procedure

Rationale

A variety of surgical procedures are available to treat bunions. The procedures are designed to correct the changes in the bony structure of the foot, and correct soft tissue changes that may also have occurred. The goal of surgery is the reduction of pain and deformity. A failed bunionectomy can take a significant toll on patients' quality of life by compromising the function and appearance of the foot, limiting ability to tolerate shoe wear, and causing chronic foot pain. Tracking post procedure outcomes remain a top priority because it can provide significant insights into the effectiveness of initial treatments, and important issues regarding follow-up care and patient satisfaction with the care provided.



Use of Pharmacotherapy for Opioid Use Disorder (OUD)

Measure Steward Applicable Specialties Member Age Range
CMS Psychiatry 18-90 yrs

Description

Measures the proportion of patients diagnosed for the first time in a 90 day lookback period with opioid use disorder who filled a prescription for an OUD therapy medication within 7 days of the index diagnosis

Rationale

Patient outcome studies suggest that pharmacotherapy can improve outcomes for individuals with OUD and that continuity of pharmacotherapy is critical to prevent relapse and overdose. However, despite the evidence and recommendations of clinical practice guidelines, pharmacotherapy is an underutilized treatment option for individuals with OUD. This measure's goal is to address this gap in care. This care process measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



Continuity of Pharmacotherapy for Opioid Use Disorder (OUD)

Measure Steward

University of Southern California

Applicable Specialties

Psychiatry

Member Age Range

18-90 yrs

Description

Measures the proportion of patients previously diagnosed with opioid use disorder (OUD) and taking OUD therapy medication who maintain 93% proportion of days covered with their OUD medications for the first 6 months of the measure year

Rationale

Recent patient outcome studies suggests that pharmacotherapy can improve outcomes for individuals with OUD and that continuity of pharmacotherapy is critical to prevent relapse and overdose. However, despite the evidence and recommendations of clinical practice guidelines, pharmacotherapy is an underutilized treatment option for individuals with OUD. This measure's goal is to address this gap in care. This care process measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



Patients Previously Diagnosed with a Mental Health Disorder having a Mental Health or Substance Abuse-Related ED Visit

Measure Steward Applicable Specialties Member Age Range

CAB Psychiatry 1-90 yrs
Psychology

Counseling

Description

Measures the rate of patients having a behavioral or substance abuse-related ED visit during the measure year in patients previously diagnosed with a mental health disorder.

Rationale

Visits to emergency departments (EDs) for substance abuse pose significant problems for public health and emergency care. Mental illness can affect people of all ages. In the United States, 18% of adults and 13%-20% of children under 18 years of age experience mental illness. Evidence shows that outpatient engagement and timely follow-up care post discharge for people with mental illness is linked to fewer repeat ED visits, improved physical and mental function and increased treatment compliance. This care process measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



Patients Previously Diagnosed with Substance Abuse having a Mental Health or Substance Abuse-Related ED Visit

Measure Steward Applicable Specialties Member Age Range

CAB Psychiatry 1-90 yrs

Psychology Counseling

Description

Measures the rate of patients having a behavioral or substance abuse-related ED visit during the measure year in patients previously diagnosed with a substance abuse diagnosis

Rationale

Mental illness is highly comorbid in people with addiction and associated with low rates of treatment engagement, retention, and completion. Co-occurring substance use disorders (SUDs) and mental disorders are linked to numerous negative health outcomes and life circumstances, like elevated risk of homelessness, trauma, and self-harm. To close treatment gaps and ensure that people achieve long-lasting recovery, providers need to educate patients and family members on the importance of their diagnosis, treatment adherence and proper and timely follow ups. Providers can also recommend alternative options during crisis such as virtual and acute care clinics. This outcome quality measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



Patients Previously Diagnosed with Self Harm or Suicide Attempt having a Mental Health or Substance Abuse-Related ED Visit

Measure Steward

Applicable Specialties

Psychiatry
Psychology

Counseling

Description

Measures the rate of patients having a behavioral or substance abuse-related ED visit during the measure year in patients previously diagnosed with a self harm or suicide attempt

Rationale

Emergency department visits for self-harm and suicidal ideation have increased for US older adults. While there are effective ED-based interventions in place for patients at high risk of suicide, these interventions are not widely used in community practice. The purpose of this outcome measure is to examine outpatient care of older adults treated in emergency departments for suicide attempt (SA), suicidal ideation (SI), or deliberate self-harm (DSH). To close treatment gaps and ensure that people achieve long-lasting recovery, providers need to educate patients and family members on the importance of their diagnosis, treatment adherence and proper and timely follow ups. Providers can also recommend alternative options during crisis such as, virtual and acute care clinics. This outcome quality measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



Patients Previously Diagnosed with Major Depressive Disorder having a Depression-Related Acute Hospital Admission

Measure Steward Applicable Specialties Member Age Range

CAB Psychiatry 6-90 yrs

Psychology Counseling

Description

Measures the rate of patients having a depression- related inpatient admission during the measure year in patients previously diagnosed with major depressive disorder

Rationale

Evidence shows that depressive symptoms are associated with higher general hospital admissions, longer hospital stays and increased risk of re-admission posing a high cost to the healthcare system. Additionally, depression is a primary cause of disability and functional limitations, reduced quality of life, and mortality. To close treatment gaps and ensure that people achieve long-lasting recovery, providers need to educate patients and family members on the importance of their diagnosis, treatment adherence and proper and timely follow ups. Providers can also recommend alternative options during crisis such as virtual and acute care clinics. The purpose of this measure is to examine outpatient care of older adults with major depressive disorder. This outcome quality measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



Antidepressant Medication Management (AMM)

Measure Steward Applicable Specialties Member Age Range
NCQA Psychiatry 18+ yrs

Description

Assesses adults 18 years of age and older with a diagnosis of major depression who were newly treated with antidepressant medication and remained on their antidepressant medications

Rationale

Major depression can lead to serious impairment in daily functioning, including change in sleep patterns, appetite, concentration, energy, self-esteem, and can lead to suicide (the tenth leading cause of death in the United States each year). Clinical guidelines for depression emphasize the importance of effective clinical management in increasing patients medication compliance, monitoring treatment effectiveness, and identifying and managing side effects. Effective medication treatment of major depression can improve a persons daily functioning and well-being and can reduce the risk of suicide. With proper management of depression, the overall economic burden on society can be improved, as well. Managing providers can assess their own performance in comparison to benchmarks and identify areas for targeted improvements.



Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM)

Measure Steward Applicable Specialties Member Age Range
NCQA Psychiatry 1-17 yrs

Description

Assesses the percentage of children and adolescents with ongoing antipsychotic medication use who had metabolic testing during the year

Rationale

Antipsychotic prescribing for children and adolescents has increased rapidly in recent decades. These medications can elevate a child's risk for developing serious metabolic health complications associated with poor cardiometabolic outcomes in adulthood. Given these risks and the potential lifelong consequences, metabolic monitoring (blood glucose and cholesterol testing) is an important component of ensuring appropriate management of children and adolescents on antipsychotic medications. Managing providers can assess their own performance in comparison to benchmarks and identify areas for targeted improvements.



Initiation of Alcohol and Other Drug Abuse or Dependence Treatment (IET)

Measure Steward Applicable Specialties Member Age Range
NCQA Psychiatry 13+ yrs

Description

Assesses adults and adolescents 13 years of age and older with a new episode of alcohol or other drug (AOD) dependence who received initiation of AOD treatment and follow-up engagement

Rationale

In 2016, 20.1 million Americans over 12 years of age (about 7.5% of the population) were classified as having a substance use disorder involving AOD. Treatment, including MAT, in conjunction with counseling or other behavioral therapies, has been shown to reduce AOD-associated morbidity and mortality, improve health, productivity and social out comes and reduce health care spending. Despite strong evidence, less than 20% of individuals with substance use disorders receive treatment. Managing providers can assess their own performance in comparison to bench marks and identify areas for targeted improvements.



Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET)

Measure Steward Applicable Specialties Member Age Range
NCQA Psychiatry 13+ yrs

Description

Assesses adults and adolescents who initiated treatment and had two or more additional AOD services or MAT within 34 days of the initiation visit

Rationale

In 2016, 20.1 million Americans over 12 years of age (about 7.5% of the population) were classified as having a substance use disorder involving AOD. Treatment, including MAT, in conjunction with counseling or other behavioral therapies, has been shown to reduce AOD-associated morbidity and mortality, improve health, productivity and social outcomes and reduce health care spending. Despite strong evidence, less than 20% of individuals with substance use disorders receive treatment. Managing providers can assess their own performance in comparison to benchmarks and identify areas for targeted improvements.



Adherence to Antipsychotic Medications for Individuals with Schizophrenia (SAA)

Measure Steward Applicable Specialties Member Age Range
CMS Psychiatry 19-64 yrs

Description

Assesses adults 18 years of age and older who have schizophrenia or schizoaffective disorder who were dispensed and remained on an antipsychotic medication for at least 80 percent of their treatment period

Rationale

Schizophrenia is a chronic and disabling psychiatric disorder that requires ongoing treatment and monitoring. Symptoms include hallucinations, illogical thinking, memory impairment, and incoherent speech. Medication non-adherence is a common and a major concern in the treatment of schizophrenia. Using antipsychotic medications as prescribed reduces the risk of relapse or hospitalization. Managing providers can assess their own performance in comparison to benchmarks and identify areas for targeted improvements.



30-Day COPD-Related Readmission Post COPD Discharge

Measure Steward Applicable Specialties Member Age Range
AHRQ Pulmonology 40-90 yrs

Description

Measures the 30-day COPD-related readmission rate for patients discharged from the hospital with principal diagnosis of COPD on the index discharge

Rationale

Chronic obstructive pulmonary disease (COPD) is a major cause of morbidity and mortality. One of the main characteristics of this disease phenotypes is acute exacerbations. Admissions for exacerbations account for large portion of costs associated with COPD. Hospital admission or readmission is an important outcome for patients, as it is disruptive to patients and caregivers, costly to the healthcare system, and puts patients at additional risk of hospital-acquired infections and complications. Research has shown that readmission rates are influenced by the quality of inpatient and out patient care and adherence to treatment plans. Despite the need to provide prompt patient follow-up during the transition from hospital to home, gaps within the health care system create barriers to providing timely post discharge care. These gaps include breakdowns in practitioner and patient communication, lengthy time to follow-up, and incomplete medication reconciliation. The purpose of this measure is to examine outpatient care of adults with COPD. This outcome quality measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



Patients Age 18-65 Previously Diagnosed with Asthma having an Asthma-Related ED Visit

Measure Steward Applicable Specialties Member Age Range
CAB Pulmonology 18-65 yrs

Description

Measures the rate of patients having an asthma-related ED visit during the measure year in 18-65 year old patients previously diagnosed with asthma

Rationale

Asthma is one of the most common chronic diseases in younger adults. Patients with asthma often present to the emergency department for treatment for acute exacerbations. Evidence shows that consistency of ambulatory asthma care can decrease asthma-specific ED utilization risk and providers should reinforce the use of follow-up care and education for high-risk groups to improve their quality of life. This outcome quality measure allows managing providers to assess their own performance and identify areas for targeted process improvements.



Pharmacotherapy Management of COPD Exacerbation (Bronchodilators) (PCE)

Measure Steward

Applicable Specialties

Member Age Range

Pulmonology

40+ yrs

Description

NCQA

Assesses chronic obstructive pulmonary disease (COPD) exacerbations for adults 40 years of age and older who had appropriate medication therapy to manage an exacerbation where a COPD exacerbation is defined as an inpatient or ED visit with a primary discharge diagnosis of COPD

Rationale

Approximately 15 million adults in the United States have COPD, an irreversible disease that limits airflow to the lungs. COPD exacerbations or flare-ups make up a significant portion of the costs associated with the disease. However, symptoms can be controlled with appropriate medication. Appropriate prescribing of medication following exacerbation can prevent future flare-ups and drastically reduce the costs of COPD. Managing providers can assess their own performance in comparison to benchmarks and identify areas for targeted improvements.



Pharmacotherapy Management of COPD Exacerbation (Systemic Corticosteroids) (PCE)

Measure Steward	Applicable Specialties	Member Age Range
NCQA	Pulmonology	40+ yrs

Description

Assesses chronic obstructive pulmonary disease (COPD) exacerbations for adults 40 years of age and older who had appropriate medication therapy to manage an exacerbation where a COPD exacerbation is defined as an inpatient or ED visit with a primary discharge diagnosis of COPD

Rationale

Approximately 15 million adults in the United States have COPD, an irreversible disease that limits airflow to the lungs. COPD exacerbations or flare-up make up a significant portion of the costs associated with the disease. However, symptoms can be controlled with appropriate medication. Appropriate prescribing of medication following exacerbation can prevent future flare-ups and drastically reduce the costs of COPD. Managing providers can assess their own performance in comparison to benchmarks and identify areas for targeted improvements.

