



BlueCross BlueShield of Illinois



Provider Efficiency, Appropriateness, & QualitySM

PEAQSM

Program Methodology

Table of Contents

Overview of Provider Efficiency, Appropriateness, & Quality Program	1
Composite Results	1
Composite Scenario	1
Summary Overview	2
Efficiency	2
Appropriateness	2
Quality	2
Current Specialties Measured	2
Continuous Improvement	3
Providers Not Evaluated	3
Efficiency Measurement Details	4
Episode-based Cost of Care for Specialists	4
Condition Episodes	4
Treatment Episodes	4
Attribution	4
Adjustment	4
Scoring	4
Total FFS Cost of Care for PCPs	5
Attribution	5
Adjustment	5
Scoring	5
Appropriateness Measurement Details	6
Measure Details	6
Measure Construction	6
Appropriateness Practice Score	7
Attribution/Assignment	7
Quality Measurement Details	8
Measure Details	8
Measure Construction	8
Quality Practice Score	8
Provider Review and Inquiry Process	9

Overview of Provider Efficiency, Appropriateness, & Quality Program

At Blue Cross and Blue Shield of Illinois, we take the quality and affordability of the care provided to our members very seriously. One of our core objectives is to maximize and improve the **value of care** our members receive.

To further this commitment, our PEAQ program evaluates provider performance in a transparent and multidimensional way. A goal of PEAQ is to work with providers to maximize their efficiency, appropriateness, and quality of care. We regularly evaluate the program based on new clinical data and input from practicing providers.

The guiding principles of our PEAQ program include:

- **Metrics** – Selecting meaningful measures of health care efficiency, appropriateness, and quality
- **Collaboration** – Sharing with providers to ensure measurement transparency and clinical relevance
- **Insights** – Giving provider-level insights on improving overall patient care
- **Transparency** – Equipping providers with meaningful information about efficiency, appropriateness, and quality
- **Continuous Improvement** – Reevaluating our methodology and measures regularly based on feedback and recent clinical evidence
- **Member Focus** – Helping our members identify providers who are right for them

Composite Results

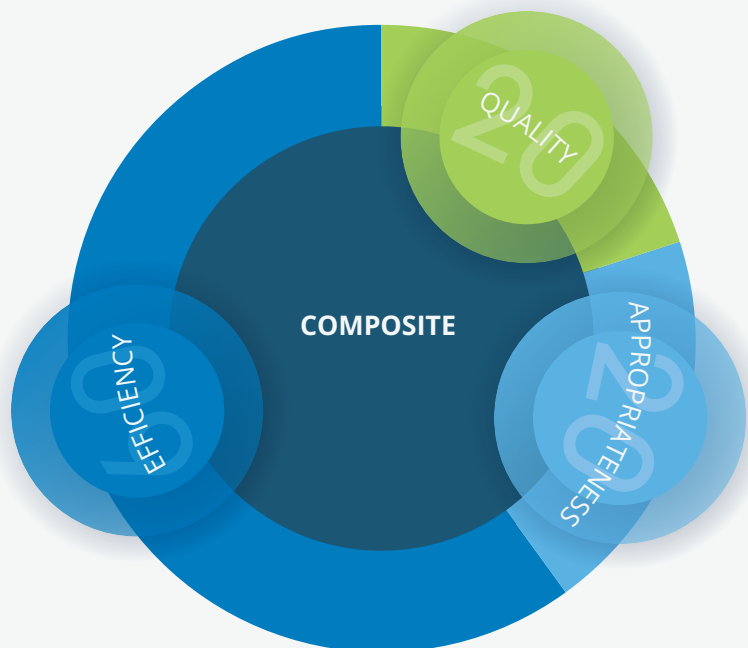
The PEAQ composite result is an overall look at the provider's efficiency, appropriateness, and quality performance during the reporting period. A composite result allows BCBSIL to fairly compare providers with the same working specialty. The results are included in Provider Performance Insights reports.

BCBSIL uses a weighted average to calculate the composite result. The calculated results are normalized between 0 and 10. Extreme outliers are removed.

Illinois providers must meet minimum thresholds for at least one component to receive scores. If a provider did not meet minimum thresholds for other components, they receive an average score if they had no performance in the component or a backfill score if they had some performance in the component. A backfill score is a weighted average of their performance and performance of providers in their medical group.

Composite Scenario

Efficiency (**60%**) +
Quality (**20%**) +
Appropriateness (**20%**) =



Summary Overview

The three key components of our PEAQ program are described below.

Efficiency

PEAQ uses Blue Cross Blue Shield Axis® (BCBS Axis®) data to evaluate a provider's cost efficiency. BCBS Axis is a collaboration between the Blue Cross Blue Shield Association and Motive Medical Intelligence for evaluating provider cost of care with data-driven solutions.

The efficiency component compares providers to their Illinois peers in the same working specialty. It **evaluates specialists with episode-based cost of care measurements and PCPs with total fee-for-service cost of care measurements**. The model applies comorbidity and demographic adjustments to account for other factors influencing care delivery outcomes.

Appropriateness

The appropriateness measures reflect whether care provided is evidence-based and/or meets generally accepted standards of practice based on **peer-reviewed evidence and clinical best practices**. Expert providers review the results to ensure clinical appropriateness.

Quality

Quality measures focus on the individual provider's role within the care team in managing conditions, performing procedures and following up with recommended care. Through claims evaluation, we gain insights into how provider practice patterns align with the **clinical practice guideline recommendations** from the major specialty and subspecialty societies.

Current Specialties Measured

The PEAQ program measures providers across primary care, medical, and surgical specialties where there is sufficient share of practice. Measured specialties are listed below:

Medical	Surgical	Primary Care ¹
Cardiology Endocrinology Gastroenterology Nephrology Neurology Obstetrics and Gynecology Oncology Psychiatry Pulmonary Disease Radiation Oncology Rheumatology	Cardiothoracic Surgery General Surgery Ophthalmology Orthopedic Surgery Otolaryngology Urology Vascular Surgery	Family Practice Internal Medicine Pediatrics

1. Nurse practitioners, physician assistants, and registered nurses are evaluated for these specialties only.
Based on available data, some specialties may not receive a PEAQ score.

Continuous Improvement

We continually reevaluate our methodology for accuracy and statistical rigor in each of the three components of the PEAQ program. Improvements are made based on feedback and future development. Major changes to the methodology are noted in provider communications.

Providers Not Evaluated

For a variety of reasons, not all providers are evaluated by the PEAQ program. These reasons may include:

- Specialty not included in current measurement
- Inadequate peer group information
- Not meeting data thresholds for credible results

Primary care physicians include pediatric, general practice, family practice, and internal medicine physicians, as well as nurse practitioners, physician assistants, and registered nurses.

Efficiency Measurement Details

BCBS Axis's approach to cost efficiency evaluates specialists with episode-based cost of care and PCPs with total fee-for-service cost of care. These approaches account for providers, patients, and attributed benefits to ensure fair comparisons.

Episode-based Cost of Care for Specialists

Episode groupers organize and aggregate claims into clinically and analytically meaningful groups. The Episode of Care grouper constructs both condition and treatment episodes used for the episode-based cost measures.

Condition Episodes

Condition episodes are diagnosis-based and grouped together by related diagnoses for specific acute or chronic conditions. Episodes are created for each condition from member claims, including pharmacy claims in most cases.

Treatment Episodes

Treatment episode groups are event-based and caused by a major medical event, such as a surgery. After identifying such a procedure, we create group look-back and look-forward periods to attach all relevant claims to the primary event. Pharmacy claims are not included in treatment episodes.

Attribution

Condition episodes are attributed to the providers most responsible for care during the reporting period. This is

done by reviewing which provider the member visited most for the condition. Members can be attributed to multiple providers with a limit of one provider per specialty per reporting period.

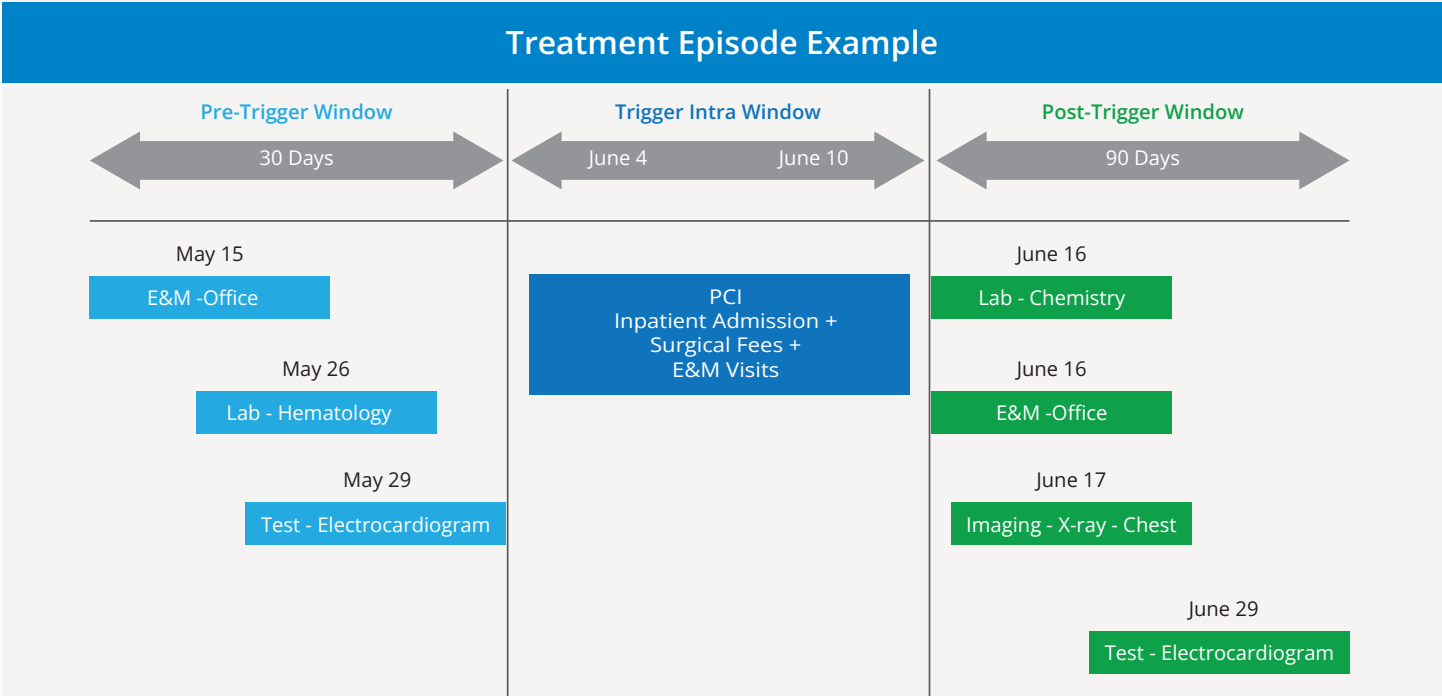
Treatment episodes are attributed by using claims and other criteria rankings to identify the primary providers responsible for performing the index procedure.

Adjustment

All attributed episodes that meet the refinement criteria are considered eligible episodes to be used in the cost of care measurement. These episodes undergo cost adjustment to account for known or expected differences in costs related to geography, patient risk factors, and outlier episodes.

Scoring

A provider's scoring is based on the ratio of actual costs to expected costs. A lower ratio indicates a more cost-efficient result. Before the ratio is calculated, adjustments may be made to account for overlaps with treatment episode costs. Providers who do not meet minimum volume criteria may still be scored with episodes within their medical group(s) to fill the gap in volume criteria.



Total FFS Cost of Care for PCPs

The Total FFS Cost measure was chosen for PCPs due to their responsibility in helping to manage all aspects of a patient's health and care. This approach emphasizes prevention and wellness services. It is designed to encourage PCPs to better manage chronic conditions to improve patient outcomes and cost efficiency.

Attribution

The Total FFS Cost methodology identifies and attributes members to PCPs by 1) identifying relevant visits (excluding urgent care and emergency room visits); 2) identifying PCPs involved with those relevant visits; 3) and determining the attributed provider based on number of member visits with a priority on wellness and preventive visits.

Adjustment

BCBS Axis uses a regression-based model to combine demographic, clinical, and social vulnerability factors into a comprehensive risk score for each member. The risk score is normalized before being used in formulas to determine expected costs.

Scoring

A provider's scoring is based on the ratio of actual costs to expected costs. A lower ratio indicates a more cost-efficient result. Before the calculation, provider cost aggregation and member-level adjustments are factored.

Appropriateness Measurement Details

Our appropriateness metrics evaluate the extent to which providers make decisions about patient care that are **consistent with current evidence-based guidelines**. We use measures developed by Motive Medical Intelligence for the appropriateness of care measurement methodology.

Measure Details

Appropriateness of care evaluates provider practice patterns that have potential for patient harm and wasteful spending, and/or for which significant variations in care exist among different providers. The purpose of evaluating appropriateness is to help providers practice within current evidence-based guidelines. Appropriateness of care measures are determined through a systematic examination of data, evidence, and clinical opinion.

- **Data** are abstracted from claims data from BCBSIL
- Evidence is **culled from peer-reviewed literature**, which is analyzed with quantitative bibliometrics
- **Opinion** is derived from subject matter experts who are in active clinical practice in the areas measured, and who are identified by quantitative indices of expertise

The resultant measure topics are developed with regard for the realities of clinical practice. The measures leverage a range of better practice (ROBP) to allow for clinical variables that cannot be gleaned from claims data.

Measure Construction

Appropriateness measure rates are formulated as numerator–denominator statements. They use a standardized denominator, exclusion, attribution, and numerator (DEAN) methodology. The criteria used in the measure calculations are highly specific and ensure homogeneity of the patient populations being evaluated for each measure.

Cases meeting inclusion criteria and exclusion criteria are identified within claims datasets. Numerator–denominator measures are analyzed to identify **potentially inappropriate episodes of care**.

Cases that warrant intensive treatment are excluded. Attention instead is focused on areas of known inappropriate care based on current evidence and guided by Motive Medical Intelligence’s clinical experts. These practices avoid misrepresentation of provider performance and ensure accurate measurement of performance among peers.

Measures are attributed to the provider responsible for the care decision. Cases that cannot be definitively attributed to a provider are excluded. Several considerations are involved in proper attribution, depending on the measure:

Consideration	Example
Specialty procedures are attributed only to providers within the specialty of interest.	Inappropriate cardiac catheterization is attributed to the cardiologist rather than the primary care provider.
The timing of interventions relative to provider visits may be a factor in determining attribution.	Magnetic resonance imaging of the spine is generally attributed to the provider who saw the patient most recently. This means that the MRI may be attributed to the PCP if it was performed after the PCP visit but before the subsequent spine surgeon visit. Conversely, the MRI may be attributed to the spine surgeon if it is performed after the spine surgeon visit.
For episodes of care in which the provider rendering the service is responsible for the decision to deliver that service (e.g., percutaneous coronary intervention with or without measurement of fractional flow reserve), the event of interest is attributed to the provider identified on the claim as the rendering National Provider Identifier.	In measuring provider performance on PCI without prior measurement of fractional flow reserve, the decision to perform PCI is attributed to the provider on the PCI procedure claim.

Consideration	Example
For evaluation and management measures, the event of interest is attributed to the presumptive ordering provider at a prior E&M visit instead of the rendering NPI. This approach is used because the provider rendering the service may be different from the provider responsible for the decision to deliver that service.	In a measure of MRI for neck pain, the MRI is presumed to have been ordered by the provider at the prior E&M visit, rather than the radiologist performing the procedure. Correct attribution in E&M measures requires additional nuance. For example, a PCP who saw a patient twice before ordering an MRI of the neck on the third visit will get credit for conservative care on the two visits that did not lead to imaging.

The model establishes an ROBP to account for variation in practice patterns based on clinical evidence and expert oversight. The ROBP also acknowledges the variation in medical coding practices, gaps in claims data, and the realities of clinical medicine. This may include regional resource limitations, reliance on tertiary referral, and individual patient factors. A minimum threshold number of cases is established to generate statistically significant analyses, while ensuring that providers are evaluated based on the **care decisions they make regularly**.

Appropriateness Practice Score

Providers who meet the minimum denominator thresholds for each specialty receive an appropriateness practice score for that specialty.

The APS is a composite score derived from a provider's performance against all the measures in a given specialty for which the provider has a sufficient volume of cases to qualify for measurement. To qualify for an individual measure, a provider must:

- Have a sufficient volume of qualifying denominator cases to meet the requirements for the measure
- Meet the specialty taxonomy designation criteria to qualify for reporting in the specialty

The APS is a single score that ranks all providers nationwide, according to specialty. The APS provides a summary view of the overall quality of a provider's practice patterns, with respect to evidence-based standards of care and clinical practice guidelines.

Attribution/Assignment

A patient's primary care attribution is derived from their historic claims data. For a provider or specialist to be evaluated, they must meet a minimum patient volume threshold. Patients are attributed to specialists based on claims data.

Quality Measurement Details

Our quality of care measures determine the extent to which provider care is aligned with **evidence-based clinical practice guidelines** for the management of conditions and their procedural complication rates. We use measures developed by Motive Medical Intelligence for the quality of care measurement methodology.

Measure Details

The purpose of quality of care measures attributed to individual providers is to help **ensure that our members receive consistently excellent care** over time. The measures focus on aspects of the care delivery process that are within the provider's direct control.

Quality of care measures are developed through a systematic examination of data and clinical practice guidelines and their underlying evidence, guided by clinical opinion.

- **Data** are abstracted from claims data
- **Guideline recommendations** are identified
- Motive Medical Intelligence culls the underlying **evidence from peer-reviewed literature**, which is analyzed with quantitative bibliometrics
- **Clinical opinion** is provided by subject matter experts who are in active clinical practice in the areas measured, and who are identified by quantitative indices of expertise

The resultant measure topics are developed with regard for the realities of clinical practice. They use an ROBP to allow for clinical variables that can't be gleaned from claims data, ensuring that each measure is reasonable and fair to providers.

Measure Construction

Condition-based quality measures are constructed as composites of multiple individual indicators of alignment with guideline-directed care. **Procedure-based quality measures** are constructed as individual measures of complication rates. Both condition- and procedure-based quality measures are formulated as numerator–denominator statements, using a standardized DEAN methodology.

Cases meeting inclusion criteria and exclusion criteria are identified within national claims datasets. Numerator and denominator cases are analyzed to identify opportunities to **provide care that is aligned with clinical practice guideline recommendations and high-quality clinical evidence**.

Each quality measure is attributed to the provider responsible for delivering the care. Attribution is carefully evaluated so that a given provider's scores are not biased by the actions of others, using the same attribution methodology Motive Medical Intelligence uses for its appropriateness measures. Cases that can't definitively be attributed to a provider are excluded.

Quality Practice Score

Providers who meet the minimum denominator thresholds for each specialty area receive a quality practice score for that specialty.

The QPS is a composite score derived from a provider's performance against all the indicators and measures, in a given specialty area, for which the provider has a sufficient case count to qualify for measurement.

The QPS is **a single score that ranks all providers nationwide**, according to specialty. The QPS provides a summary view of the overall quality of a provider's practice patterns, with respect to evidence-based standards of care and clinical practice guidelines, as well as avoidance of procedural complications. The score can help our members identify providers who are right for them.

Provider Review and Inquiry Process

Providers receive information about their PEAQ designations via [Availity® Essentials](#). BCBSIL will notify providers when results are available. If you don't yet have an Availity account, [register here](#). Registration is free.

Submit requests and questions about reports to PEAQ_inquiries@bcbsil.com.



BlueCross BlueShield of Illinois

Blue Cross Blue Shield Association is an association of independent Blue Cross and Blue Shield companies.

Availity is a trademark of Availity, LLC, a separate company that operates a health information network to provide electronic information exchange services to medical professionals. Availity provides administrative services to BCBSIL.

Motive Medical Intelligence is an independent company that has contracted with BCBSIL to provide analytics and measures for BCBSIL.

BCBSIL makes no endorsement, representations or warranties regarding third party vendors and the products and services they offer.

The above material is for informational purposes only and is not intended to be a substitute for the independent medical judgment of a provider. Providers and other health care providers are encouraged to use their own best medical judgment based upon all available information and the condition of the patient in determining the best course of treatment.

Image(s) may have been created or enhanced using artificial intelligence tools.