BlueCross BlueShield Geography | BlueDistinction® Specialty Care

Selection Criteria:

2025 Knee and Hip Replacement

Released May 2025

BlueCross BlueShield Association

Document Overview

The Program Selection Criteria outlines the Quality, Business, and Cost of Care Selection Criteria and evaluation processes used to determine eligibility for the Blue Distinction® Centers (BDC) for Knee and Hip Replacement program (Program).

Sections of this document include:

Blue Distinction Centers for Knee and Hip Replacement

Since 2009, the BDC for Knee and Hip Replacement program has been evaluating facilities that offer elective total knee replacements and total hip replacements for adult patients aged 18 years and older for degenerative diseases. The Program has evolved to include an evaluation of:

- Data from clinical registries
- Enhanced Recovery after Surgery (ERAS) practices
- Supports healthy communities, and
- Screening for mental health and substance use disorder

This Program evaluates performance measures and additional measures collected from the 2025 BDC for Knee and Hip Replacement Provider Survey completed by a facility representative(s); as well as facilities that participate and consented to have patient outcomes submitted directly from the American Academy of Orthopaedic Surgeons (AAOS) American Joint Replacement Registry (AJRR).

Designation as a BDC for Knee and Hip Replacement differentiates facilities locally, as well as nationally, and includes two levels of designation:

- **Blue Distinction Centers (BDC):** Facilities recognized for their expertise in delivering specialty care.
- **Blue Distinction Centers+ (BDC+)**: Facilities recognized for their expertise and cost-efficiency in delivering specialty care.

Quality is Key: Only *facilities that first meet nationally established quality measures for BDC will be considered for designation as a BDC+.*

Evaluation Process

In 2024, local Blue Plans invited more than 3,700 facilities across the country to be considered for the Blue Distinction Centers for Knee and Hip Replacement designation; over 1,500 facilities applied and were evaluated on objective, transparent selection criteria with Quality, Business, and Cost of Care components. Table 1 below outlines the data sources used for evaluation under this Program.

Table 1: Data Sources

Selection Criteria Components	Data Source	Blue Distinction Centers (BDC)	Blue Distinction Centers+ (BDC+)
Quality	• Quality data supplied by applicant facility in the Provider Survey • American Joint Replacement Registry (AJRR) *Only for facilities that participate and consented* • Local Blue Plan Quality Criteria *(if applicable)*	✓	✓
Business	• Data supplied by Blue Plan in the Plan Survey • Review of Blue Brands Criteria • Local Blue Plan Business Criteria *(if applicable)*	✓	✓
Cost of Care	• Blue Health Plan Claims Data • Local Blue Plan Cost Criteria *(if applicable)*		✓

Note: Designations are awarded to individual facilities (i.e., unique bricks-and-mortar facilities with unique addresses). Any facility with multiple locations (different addresses) was evaluated separately for each location. Health systems and other groups of multiple facilities/clinics are not designated collectively.

Quality Evaluation

Blue Distinction Specialty Care (BDSC) programs establish a nationally consistent approach to evaluating quality and safety by incorporating quality measures with meaningful impact. Selection Criteria continues to evolve through each evaluation cycle, consistent with medical advances and measurement in this specialty area. The measurement framework for this and other Blue Distinction programs were developed using the following guiding principles:

- Align with credible, evidence-based, transparent, nationally established measures with an emphasis on improved outcomes.
- Implement a nationally consistent evaluation approach.
- Include measures designed to close clinical care gaps recognized as affecting longevity and quality of life and/or contributing to higher spend.
- Evolve the selection criteria, consistent with medical advances and objective measures demonstrating improved health outcomes.
- Apply a fair and consistent evaluation approach that identifies facilities that meaningfully differentiate the delivery of care.

Quality Measure Selection

Facilities were evaluated based on quality measures developed through a collaborative process involving the medical community, Blue Plans, quality measurement experts, and review of medical literature. This process also included an analysis of national quality and safety initiatives, and a thorough analysis of meaningful quality measures. Quality Selection Criteria includes general facility structure and process measures, and performance measures specific to total knee and total hip replacements. The evaluation was based on facility responses to the Provider Survey for cases performed during the most recent 12 months prior to submitting the Provider Survey; also included are performance measures from the American Joint Replacement Registry (AJRR) for those facilities that participate and consented. ***Participation in the AJRR will become a requirement with any future cycles of this Program.***

The selected measures are incorporated into the final aggregate scoring model used for evaluating facilities. The Program aims to create a comprehensive model that demonstrates quality performance at least ten percent (10%) better than the comparison group, while providing Blue Member access to designated facilities in each of the top fifty (50) MSAs.

Furthermore, Quality Selection Criteria scoring was based on a ninety percent (90%) lower confidence limit (LCL) of the required performance measures, rather than the actual point estimate (or rate) of those measures. This approach benefits each facility by accounting for potential measurement error, based upon statistical confidence predictions. If a facility's LCL is equal to or below the threshold, its performance meets or exceeds the threshold, thus meeting the quality scoring criteria for that measure. Conversely, if a facility's LCL is above the threshold, it indicates that the facility's performance is below the threshold and that facility will not meet the quality scoring criteria for that measure. An exception to this scoring rule is the patient reported outcomes measures (PROMs). These measures were not scored and are informational only; however, higher rates are considered better.

Performance measures were evaluated only if the analytic measure volume (measure denominator) reported was greater than or equal to one (1).

If the reported analytic measure volume was less than one (1), then that performance measure was not evaluated due to insufficient data.

Table 2 below translates confidence interval (CI) results into "meets criteria" or "does not meet criteria" categories.

Table 2: Lower Confidence Limit (LCL) Evaluation

Lower Confidence Limit (LCL) Evaluation Lower Results are Better	
Facility Evaluation Result	**Facility's Lower Confidence Limit (LCL)**
Meets Criteria	LCL is **Below** or **Equal** to the Threshold
Does Not Meet Criteria	LCL is **Above** the Threshold

Quality Selection Criteria

The Quality Selection Criteria are outlined below and separated into two (2) tables:

- **Table 3**: Quality Selection Criteria for Hospitals
- **Table 4**: Quality Selection Criteria for Ambulatory Surgery Centers

Scoring of quality measures is based on both required and flexible measures.

- The facility must meet **all** required quality measures to be considered for designation.
- The facility must meet **all** flexible measures to be considered for designation. These measures require the facility to satisfy a specified number of elements within each measure.
- Informational measures are excluded from the scoring evaluation and are solely intended as an educational tool for quality improvement.

Data sources include facility responses from the Provider Survey and/or AAOS AJRR data for those facilities who participate and consented.

Table 3: Quality Selection Criteria for Hospitals

Quality Selection Criteria: Hospitals		
Measure Name	**Data Source**	**Selection Criteria Description**
REQUIRED - Structure and Process Measures		
Facility Accreditation*	Provider Survey Question #5	Facility is fully accredited by **at least one** of the following national accreditation organizations: * • The Joint Commission (TJC) in the Hospital Accreditation Program • Accreditation Commission for Health Care (ACHC) in the Acute Care Hospital Accreditation Program • DNV GL Healthcare in the National Integrated Accreditation for Healthcare Organizations (NIAHO®) Hospital Accreditation Program • Center for Improvement in Healthcare Quality (CIHQ) in the CIHQ Hospital Accreditation Program **NOTE:* *To enhance quality while improving Blue Members' access to qualified facilities, alternative local Accreditations that are at least as stringent as any National Accreditations above, may be offered under the local Blue Plan Criteria; for details, contact the facility's local Blue Plan.*
Total Facility Knee and Hip Replacement Procedure Volume (Primary & Revisions)	Provider Survey Question #22	Facility's total procedure volume for total knee and total hip replacements, reported for the most recent 12 months at the time of application, is **greater than or equal to 50 procedures**
Local Plan Quality Criteria (If Applicable)	Plan Survey	An individual Blue Plan, at its own independent discretion, may establish and apply local quality requirements as additional Local Plan Quality Selection Criteria for eligibility in a Blue Distinction Centers program, for facilities located within its Service Area.
REQUIRED – Performance Measures		
Analytic Volume (Measure Denominators)	Provider Survey Questions #24, #25, & 26 **OR** AAOS AJRR Data	Facility must have **greater than or equal to one (1)** procedure in the denominator for **each measure** for the measure to be evaluated.
90 Day Postoperative Readmission Rate	Provider Survey Question #24 **OR** AAOS AJRR Data	Facility's 90 Day Postoperative Readmission Rates' lower confidence limit (LCL) is **less than or equal to 4.30**
90 Day Postoperative Complication Composite Rate	Provider Survey Question #25 **OR** AAOS AJRR Data	Facility's 90 Day Postoperative Complication Composite Rates' lower confidence limit (LCL) is **less than or equal to 2.42** Complications included in measure: Surgical site infection (SSI), deep vein thrombosis (DVT), pulmonary embolism (PE), mechanical complication, and return to operating room/reoperation related to primary procedure.

Quality Selection Criteria: Hospitals		
Measure Name	**Data Source**	**Selection Criteria Description**
90 Day Postoperative Mortality Rate	Provider Survey Question #26 **OR** AAOS AJRR Data	Facility's 90 Day Postoperative Mortality Rates' lower confidence limit (LCL) is **less than or equal to 0.25**
FLEXIBLE – Structure and Process Measure		
Enhanced Recovery After Surgery (ERAS) Practices	Provider Survey Question #15	Facility must have implemented **at least fourteen (14)** out of the sixteen (16) Enhanced Recovery After Surgery ERAS perioperative practices.
INFORMATIONAL QUALITY MEASURES		
Facility Advanced Certification	Provider Survey Question #6	Facility has an advanced orthopedic/total joint certification.
Demographic Data: Data Collection Elements	Provider Survey Question #7	Facility collects the following demographic data: **race, ethnicity, and spoken language**.
Demographic Data: Collection Methods	Provider Survey Question #8	Facility collects **self-reported** demographic data.
Demographic Data Used for Quality Improvement	Provider Survey Question #9	Facility uses the self-identified demographic data collected to improve policies/procedures, patient safety goals, or quality improvement goals.
Demographic Data Used for Identifying Health Care Disparities	Provider Survey Question #10	Facility uses the self-identified demographic data collected to stratify quality measures with the goal of identifying health care disparities.
Demographic Data Used to Stratify Quality Measures	Provider Survey Question #11	Facility uses the self-identified demographic data collected to stratify any of the following measures: clinical processes, clinical outcomes, patient experience, and/or Consumer Assessment of Healthcare Providers and Systems (CAHPS) measures.
Patient's Perception of Care Collected	Provider Survey Question #12	Facility collects patient perception of unbiased, respectful health care delivery.
Demographic Data: Staff Training	Provider Survey Question #13	Facility provides staff training on how to collect self-identified demographic data at time of onboarding, annually after onboarding, or both.
Unconscious Bias Training for Staff	Provider Survey Question #14	Facility provides unconscious bias training to address health care team member biases and stigmas; and to promote respectful and equitable care.
Depression and/or Substance Use Disorder Pre-and Postoperative Screening Assessment	Provider Survey Question #16	Facility assesses and screens for depression and/or substance use disorders, preoperatively and/or postoperatively, using an industry standard tool.

Quality Selection Criteria: Hospitals		
Measure Name	**Data Source**	**Selection Criteria Description**
Depression and/or Substance Use Disorder Follow-Up Process for Positive Assessments	Provider Survey Question #17	Facility has a process in place for follow-up and/or referral for positive assessments and screenings for depression and/or substance use disorders.
American Joint Replacement Registry (AJRR) Participation & Data Available	Provider Survey Question #23	Facility participates in the American Joint Replacement Registry (AJRR) and has data available for patient outcome measures. ***Note: This will become a requirement with any future cycles of this Program.***
Preoperative Functional/Health Assessment Patient Reported Outcomes: THKR-IP-4a	Provider Survey Question #27 **OR** AAOS AJRR Data	Facility has elective total knee and/or total hip replacement surgery patients complete a 90-day preoperative functional/health status assessment.
Postoperative Functional/Health Assessment Patient Reported Outcomes: THKR-IP-5a	Provider Survey Question #28 **OR** AAOS AJRR Data	Facility has elective total knee and/or total hip replacement surgery patients complete a 90-day postoperative functional/health status assessment.

Table 4: Quality Selection Criteria for Ambulatory Surgery Centers

Quality Selection Criteria: Ambulatory Surgery Centers (ASC)		
Measure Name	**Data Source**	**Selection Criteria Description**
REQUIRED - Structure and Process Measures		
Facility Accreditation*	Provider Survey Question #5	ASC is fully accredited by **at least one** of the following national accreditation organizations: * • The Joint Commission (TJC) in the Ambulatory Health Care Accreditation Program • Accreditation Commission for Health Care (ACHC) in the Ambulatory Care Accreditation Program • QUAD A for Ambulatory Surgery Centers • Accreditation Association for Ambulatory Health Care (AAAHC) as an Ambulatory Surgery Center • Accredited as an additional location under the hospital system's Hospital Accreditation, refer to Table 3 for list of hospital accreditations. **NOTE*: *To enhance quality while improving Blue Members' access to qualified facilities, alternative local Accreditations that are at least as stringent as any National Accreditations above, may be offered under the local Blue Plan Criteria; for details, contact the facility's local Blue Plan.*
Total Facility Knee and Hip Replacement Procedure Volume (Primary & Revisions)	Provider Survey Question #22	ASC's total procedure volume for total knee and total hip replacements, reported for the most recent 12 months at the time of application, is **greater than or equal to 25 procedures**

Quality Selection Criteria: Ambulatory Surgery Centers (ASC)		
Measure Name	**Data Source**	**Selection Criteria Description**
Local Plan Quality Criteria (If Applicable)	Plan Survey	An individual Blue Plan, at its own independent discretion, may establish and apply local quality requirements as additional Local Plan Quality Selection Criteria for eligibility in a Blue Distinction Centers program, for facilities located within its Service Area.
REQUIRED - Performance Measures		
Analytic Volume (Measure Denominators)	Provider Survey Questions #24, #25, & 26 **OR** AAOS AJRR Data	ASC must have **greater than or equal to one (1)** procedure in the denominator for **each measure** for the measure to be evaluated.
90 Day Postoperative Readmission Rate	Provider Survey Question #24 **OR** AAOS AJRR Data	ASC's 90 Day Postoperative Readmission Rates' lower confidence limit (LCL) is **Less than or equal to 1.61**
90 Day Postoperative Complication Composite Rate	Provider Survey Question #25 **OR** AAOS AJRR Data	ASC's 90 Day Postoperative Complication Composite Rates' lower confidence limit (LCL) is **Less than or equal to 1.22** Complications included in measure: Surgical site infection (SSI), deep vein thrombosis (DVT), pulmonary embolism (PE), mechanical complication, and return to operating room/reoperation related to primary procedure.
90 Day Postoperative Mortality Rate	Provider Survey Question #26 **OR** AAOS AJRR Data	ASC's 90 Day Postoperative Mortality Rates' lower confidence limit (LCL) is **Less than or equal to 0.02**
FLEXIBLE –Structure and Process Measures		
Enhanced Recovery After Surgery (ERAS) Practices	Provider Survey Question #15	ASC must have implemented **at least fourteen (14)** out of the sixteen (16) Enhanced Recovery After Surgery (ERAS) perioperative practices.
INFORMATIONAL QUALITY MEASURES		
Facility Advanced Certification	Provider Survey Question #6	ASC has an advanced orthopedic/total joint certification.
Demographic Data: Data Collection Elements	Provider Survey Question #7	ASC collects the following demographic data: **race, ethnicity, and spoken language**.
Demographic Data: Collection Methods	Provider Survey Question #8	ASC collects **self-reported** demographic data.
Demographic Data Used for Quality Improvement	Provider Survey Question #9	ASC uses the self-identified demographic data collected to improve policies/procedures, patient safety goals, or quality improvement goals.
Demographic Data Used for Identifying Health Care Disparities	Provider Survey Question #10	ASC uses the self-identified demographic data collected to stratify quality measures with the goal of identifying health care disparities.

Quality Selection Criteria: Ambulatory Surgery Centers (ASC)		
Measure Name	**Data Source**	**Selection Criteria Description**
Demographic Data Used to Stratify Quality Measures	Provider Survey Question #11	ASC uses the self-identified demographic data collected to stratify any of the following measures: clinical processes, clinical outcomes, patient experience, and/or Consumer Assessment of Healthcare Providers and Systems (CAHPS) measures (i.e., Outpatient and Ambulatory Surgery [OAS] CAHPS)
Patient's Perception of Care Collected	Provider Survey Question #12	ASC collects patient perception of unbiased, respectful health care delivery.
Demographic Data: Staff Training	Provider Survey Question #13	ASC provides staff training on how to collect self-identified demographic data at time of onboarding, annually after onboarding, or both.
Unconscious Bias Training for Staff	Provider Survey Question #14	ASC provides unconscious bias training to address health care team member biases and stigmas; and to promote respectful and equitable care.
Depression and/or Substance Use Disorder Pre-and Postoperative Screening Assessment	Provider Survey Question #16	ASC assesses and screens for depression and/or substance use disorders, preoperatively and/or postoperatively, using an industry standard tool.
Depression and/or Substance Use Disorder Follow-Up Process for Positive Assessments	Provider Survey Question #17	ASC has a process in place for follow-up and/or referral for positive assessments and screenings for depression and/or substance use disorders.
American Joint Replacement Registry (AJRR) Participation & Data Available	Provider Survey Question #23	ASC participates in the American Joint Replacement Registry (AJRR) and has data available for patient outcome measures. ***Note: This will become a requirement with any future cycles of this Program.***
Preoperative Functional/Health Assessment Patient Reported Outcomes: THKR- OP-4b	Provider Survey Question #27 **OR** AAOS AJRR Data	ASC has elective total knee and/or total hip replacement surgery patients complete a 90-day preoperative functional/health status assessment.
Postoperative Functional/Health Assessment Patient Reported Outcomes: THKR- OP-5b	Provider Survey Question #28 **OR** AAOS AJRR Data	ASC has elective total knee and/or total hip replacement surgery patients complete a 90-day postoperative functional/health status assessment.

Business Selection Criteria

The Business Selection Criteria (Table 5) consists of the following components:

- Provides Knee and Hip Replacement procedures
- Facility Participation.
- Surgeon Participation.
- Blue Brands Criteria; and
- Local Blue Plan Criteria (if applicable)

A facility must meet **all** components listed in Table 5 to meet the Business Selection Criteria for the Blue Distinction Centers for Knee and Hip Replacement designation. Information related to the Business Selection Criteria is collected through the Plan Survey.

Table 5: Business Selection Criteria

Business Selection Criteria	
Knee and Hip Replacement Procedures	Facility must provide Knee and Hip Replacement procedures.
Facility Participation	Facility must participate in the local Blue Plan's BlueCard Preferred Provider Organization (PPO) Network.
Surgeon Participation*	All Surgeons identified in the Provider Survey are required to participate in the local Blue Plan's BlueCard PPO Network.
Blue Brands Criteria	Facility and its corporate family meet BCBSA criteria for avoiding conflicts with BCBSA logos and trademarks.
Local Blue Plan Criteria (if applicable)	An individual Blue Plan, at its own independent discretion, may establish and apply local business requirements as additional Selection Criteria for eligibility in a Blue Distinction Centers program, for facilities located within its Service Area.

**De Minimis Rule may be applied to the Physician Specialists Participation criteria, at the local Blue Plan's discretion.*

Cost of Care Selection Criteria

In addition to meeting the nationally established, objective quality and business measures for BDC, an applicant facility must also meet **all** the following Cost of Care Selection Criteria (Table 6) requirements to be considered eligible for the BDC+ designation.

Table 6: Cost of Care Selection Criteria

Cost of Care Selection Criteria	
Measure Name	**Selection Criteria Description**
Episode Procedure Volume - Hospitals	Hospital has **greater than or equal to 5** matched episodes of cost data in **both** of the Clinical Categories: • Total Knee Replacements • Total Hip Replacements
Episode Procedure Volume - ASCs	ASC has **greater than or equal to 5** matched episodes of cost data in **at least one** of the Clinical Categories: • Total Knee Replacements • Total Hip Replacements
Composite Cost Index	Facility's Composite Cost Index must be less than the applicable Plan Cost Index. The Plan Cost Index offers local differentiation and varies by State, to reflect relative cost efficiencies within each Blue Plan's Service Area.
Local Plan Cost Criteria **(If Applicable)**	An individual Blue Plan, at its own independent discretion, may establish and apply additional local cost requirements as Local Plan Cost Selection Criteria for eligibility in a Blue Distinction Centers program, for facilities **located within its Service Area**.

Quality is Key: Only facilities that first meet nationally established quality and business measures for Blue Distinction Centers will be considered for designation as a Blue Distinction Center+.

Cost Selection Criteria were set based on the following market goals:

- Cost savings differential greater than 20% of BDC+ facilities across the national program, when compared to all other facilities (non-BDC+ eligible evaluated facilities and non-evaluated facilities).
- Cost savings differentials for individual Plan's Service Area, which provide differentiation at a local level, and may vary at the State level. For details contact the local Blue Plan.
- Broad geographic distribution and member accessibility, targeting accessibility in the majority of states and top 50 Metropolitan Statistical Areas (MSAs)

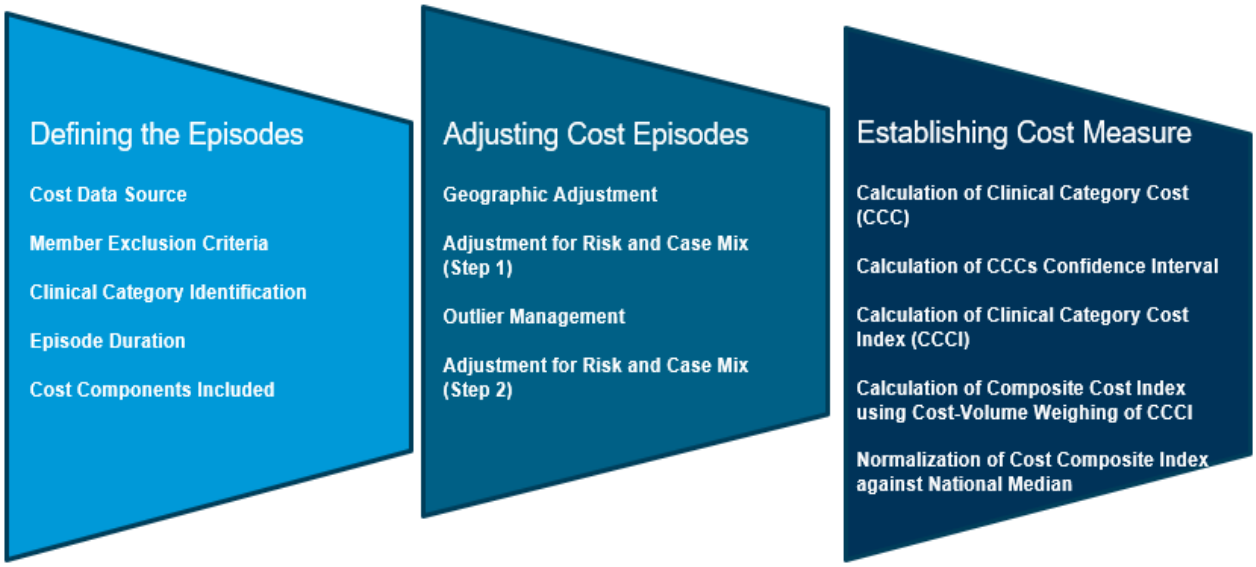
Cost of Care Evaluation

Cost of care measures were designed to address market and consumer demand for cost savings and affordable health care. The Cost of Care Selection Criteria was used to provide a consistent and objective approach to identify BDC+ facilities. The inputs and methodology used in the cost of care evaluation are explained below.

Cost of Care Methodology Framework

The cost of care evaluation uses a consistent framework to define and adjust episodes, and to establish and compare the resulting cost measures.

Figure 1: Cost of Care Methodology Framework Illustration



Defining Cost Episodes of Care

Cost of Care evaluation was based on a nationally consistent analysis of Blue Plan Claims data. To provide validity for comparisons, cost analytics for the BDC for Knee and Hip Replacement program focuses on total knee replacements and total hip replacements.

Cost Data Source

Each facility's cost of care is calculated using adjusted allowed amounts for total knee and total hip replacement specific episodes of care for actively enrolled Blue Members, derived from available Blue Plans' PPO claims data with an episode trigger date from **July 1, 2020, through June 30, 2023, and paid through September 30, 2023**.

Clinical Category Identification Criteria

Episodes of care are identified and defined based on diagnosis and/or procedure codes billed by hospitals and physicians. In the BDC for Knee and Hip Replacement program, episodes are triggered by surgery procedures using CPT, HCPCS, and ICD-10 procedure codes. For example, a knee replacement episode is triggered by service code(s) for that procedure.

Relevant clinical categories for this BDC designation are primary total knee replacement and primary total hip replacement (excluding revisions, partials, hip fractures, and trauma cases).

To improve clinical comparability of episodes within a clinical category, episodes with the most typical primary diagnoses are selected and included (see Table 7, below). The remaining atypical

primary diagnoses, as well as episodes with evidence of diagnosis codes indicating high-cost comorbidity (e.g., cancer, chronic renal failure [CRF]), were excluded.

Table 7: Clinical Category and Primary Diagnosis Included

Clinical Category	Primary Diagnosis Included
Total Knee Replacements	Osteoarthritis
Total Hip Replacements	Osteoarthritis
	Osteonecrosis
	Idiopathic Aseptic Necrosis

Clinical category costs are adjusted for the impact of significant patient co-morbidities, via risk adjustment methods; and high-cost outlier cases are being managed, as outlined below.

Episode Duration and Continuous Eligibility Requirement

Each surgery episode type has time windows before and after the episode trigger event within which relevant services may be included. The episode window for both total knee replacement and total hip replacement begins 30 days prior to date of admission of the index admission and ends 90 days following discharge from the index admission. Episodes will be included in the analysis only if the member is continuously eligible for Blue Cross Blue Shield (BCBS) PPO benefits throughout the episode duration. Incomplete episodes (such as gaps in member eligibility during the look-back and look-forward windows and lack of both facility and professional claims) were excluded.

Cost Components Included in Episode

After an episode was "triggered," services are linked to the episode in a comprehensive and consistent manner to improve completeness and comparability of costs. Claims were included in all treatment episodes for which the claim was determined to be relevant. Pharmacy claims are not included in treatment episodes for facility cost evaluation.

Member Inclusion/Exclusion criteria:

The final subset of episodes included in Blue Distinction Centers+ (BDC+) measurement was identified by applying inclusion or exclusion criteria based on both general episode characteristics and procedure-specific clinical logic, i.e., BCBS PPO product, age, gender, matching, and availability of a geographic adjustment factor (GAF). The specific inclusion/exclusion criteria for the BDC for Knee and Hip Replacement program is included in Table 8, below.

Table 8: Summary of Episode Inclusion/Exclusion Criteria

Criteria	Inclusion/Exclusion Specifications
Blue Plan Claims Timeframe and Primary Index Inclusion	• **Blue Plan Claims Timeframe:** July 1, 2020, through June 30, 2023, and paid through September 30, 2023. • Primary index procedure (Total Knee or Total Hip Replacement) occurred between 7/1/2020 and 6/30/2023 • Blue Plan Claim was matched to the applicant facility

Criteria	Inclusion/Exclusion Specifications
Episode Duration Inclusion	• **Look-Back Period** = 30 days prior to the date of the index admission. • **Index Admission** = Total Knee or Total Hip Replacement surgical procedure. • **Look-Forward Period** = 90 days post discharge from index admission
Episode Cost Components Inclusion	• Episode includes both **facility and professional** charges (except for an ASC billing through professional claims only) • Includes only procedures with appropriate diagnosis code (Table 7, above) • **Look-Back Period** = services provided for pre-operative evaluation or preparation • **Index Admission** = services corresponding to the triggering procedure, a supporting component for the surgery, a sequela; a service pertaining to the patient's underlying condition for which the surgery was provided; or an unrelated co-morbidity • **Look-Forward Period** = services provided as a supporting component of the surgery itself or if provided as care for a complication of the surgery or underlying condition
Member Eligibility Status Inclusions	• Member was continuously enrolled in a Blue Plan PPO product for the duration of the episode. • Member aged 18 to 64 years old at time of surgery • Member gender female or male (unknown gender was excluded from episode)
Site of Service Inclusions	• Hospital inpatient (includes hospital outpatient) • Ambulatory Surgery Centers
Member Discharge Status Exclusions	• Exclude members with discharge status either death in medical facility or Left Against Medical Advice for procedure admission
Episode Exclusions	• Excludes episodes with evidence of diagnosis codes indicating high-cost comorbidity (i.e., cancer, CRF) • Excludes episodes with only unilateral joint procedures, and episodes with evidence of simultaneous or staged bilateral replacement • Excludes episodes with evidence of unrelated procedures (i.e., overlapping episodes)

In subsequent analytic steps outlined over the next sections, clinical category costs were adjusted by factors known to have a predictable impact on costs of care. High-cost outlier episodes were managed to limit the impact on average costs for a facility. No other clinical exclusions were applied.

Adjusting Episode Costs

Adjustments to episode costs are needed for both the validity and fairness of cost comparisons among facilities, and included two types of adjustments:

- Factor adjustment – which adjusts for factors known to have a predictable impact on costs of care; and
- Outlier management – which protects against rare, unpredictable, high-cost and very low frequency events that could have a dramatic impact on average costs for a facility.

Two types of factor adjustments are commonly made in health care cost comparisons:

- Adjustments for predictable cost differences related to geography; and
- Adjustments for predictable cost differences due to risk (or, more specifically, due to differences in the clinical characteristics of patients and age that have a measurable and predictable impact on costs).

Geographic Adjustment

Blue Distinction Specialty Care (BDSC) programs use a nationally consistent approach to evaluating facilities. Adjustment for difference in geographical cost is needed to support credible comparison of facilities in different markets, with different underlying costs that a facility cannot readily control. For this reason, cost comparisons typically include adjustments for geographic differences in the prices that a facility pays for the goods and services routinely used in the production of health care services, such as labor, utilities, and rent. A set of Geographic Adjustment Factors (GAF) has been developed by the Centers for Medicare and Medicaid Services (CMS) to adjust Medicare provider payments. The BDC for Knee and Hip Replacement program used CMS' set of CY2024 GAF values to adjust episode cost comparisons; specifically, this cycle used GAFs for 112 Geographic Practice Cost Index (GPCI) locality levels, as defined by CMS.

The ZIP code of the facility providing the episode trigger service was used to identify the applicable GAF. Specifically, the GAF used was selected from the trigger claim, reflecting the attributed facility's ZIP code, and was applied to all claims included in the episode.

The GAF was used to adjust the actual cost of an episode by "leveling the playing field" between facilities in high-cost areas versus low-cost areas. This was accomplished by dividing the episode's unadjusted allowed amount by the applicable GAF, calculated as **Adjusted Cost** = **Actual Cost / GAF**.

Adjustment for Risk and Case-Mix

Adjustment for differences in patient risk was needed to support the credible comparison of episode costs for different facilities. Risk adjustment was used to account for cost differences related to differences in patient comorbidities and conditions for patients undergoing the same treatment or admitted for the same principal condition. For example, episode costs for patients with diabetes would be expected to be higher than episode costs for patients without diabetes.

Blue Health Intelligence (BHI), BCBSA's data analytics partner, uses the Elixhauser Comorbidity Index (ECI) as the comorbidity adjustment model to account for the impact of health status on episode cost.

With the risk of mortality as the ultimate measure of patient health, the ECI score, and the risk weights associated with each of the ECI conditions are used to establish the overall measure of patient risk and health status.

As an indicator of patient complexity, the comorbidity index is used to adjust episode costs to account for differences directly related to the patient's health status (i.e., risk). The ECI was developed as part of the Agency for Healthcare Research and Quality (AHRQ) Healthcare Cost and Utilization Project (HCUP) to use administrative claims data to flag comorbidities that co-exist at the time of an inpatient admission or outpatient encounter and affect health care outcomes, including the risk of mortality and readmission.

The ECI (v2023.1) identifies 38 individual condition categories and empirically assigns weights that represent the relative risk of mortality for a patient with that condition. BHI uses the same ECI condition categories, diagnosis mappings, and summing methodology published by AHRQ. The AHRQ condition weights are transformed such that the scale starts at zero to remove the impact of negative weights while maintaining the hierarchical relationship of the conditions. We expanded the look-back period for ECI condition flagging to the year prior to the episode start. The ECI score is calculated using all coded diagnoses on all claims as of one day prior to the start of the episode for condition episodes and as of one day prior to the procedure date for treatment episodes. Analyzing a member's claims history allows for consideration of all comorbid conditions, regardless of whether they were coded during the admission or not, while avoiding flagging complications as comorbidities. Members without claim history where an ECI score could not be calculated are assigned a score of zero.

The ECI scores were assigned to terciles of low, medium, and high, which fed into the risk adjustment. In addition to risk, multiple subcategories that accounted for expected differences in cost due to procedure subcategory, setting (inpatient, outpatient, and ASC), gender, and age were used to calculate risk adjustment factors. Separate bands (i.e., strata) were included to provide better risk assessment within each clinical category. As an example, age bands can be used to identify and adjust for age-related differences in expected costs.

Outlier Management

The purpose of outlier management is to protect against rare, unpredictable high-cost events that could have a dramatic impact on a facility's calculated average cost performance. Geographically adjusted episode costs were then winsorized accordingly for each clinical category and risk level distribution. Thus, for example, adjusted per episode costs were winsorized separately within knee replacement in in all age-bands and risk levels low, medium, and high. In the BDC for Knee and Hip Replacement program, per-episode costs were winsorized (capped) at the 98th percentile for high costs and at the 2nd percentile for low costs of episodes for each applicable distribution.

Minimum Episode Volume Requirement – National

At the national level, a minimum of 20 episodes per risk cohort was required to calculate consistent cost estimates in each sub-category level. All joint risk cohorts met this threshold, and none were excluded from the analysis.

Calculation of Risk Adjustment Factor and Expected Episode Costs

The mean of the geographically adjusted, winsorized episode costs for each clinical category/risk level combination at the national level will be expected cost for that clinical category/risk level combination. The national expected cost for each clinical category/risk level combination will be

divided by the national mean cost for the clinical category, to calculate the Risk Ratio for each clinical category/risk level combination.

The Risk Adjustment Factor (which is the inverse of the Risk Ratio) is multiplied by each facility's geographically adjusted and winsorized facility episode costs for each clinical category/risk level combination to normalize for risk, resulting in a final episode cost that is both geographically adjusted, and risk adjusted.

Establishing a Cost Measure

Each episode was attributed to the facility where the primary surgery occurred, based on trigger events that occurred at that facility for each of the two clinical categories: total knee replacements and total hip replacements. Each facility has a separate calculation for the Clinical Category Facility Cost (CCFC) based on the median value of the adjusted episode costs. Confidence intervals (90 percent) were calculated around each Clinical Category Facility Cost (CCFC) measure; the Upper Confidence Limit (UCL) of the measure was divided by the National Median Episode Cost to become the Clinical Category Facility Cost Index (CCFCI). The combined cost index of the median UCL was rounded down to the nearest 0.025 to give facilities the benefit of the doubt and to avoid situations where a facility narrowly missed BDC+ eligibility by an immaterial margin. The rounded median UCL was the measure used for cost scoring. For reliability, a minimum of five episodes was required within a clinical category for the data to be included in the calculation of a Composite Facility Cost Index (CompFCI) for a facility.

Using each of the Clinical Category Facility Cost Index values, an overall Composite Facility Cost Index (CompFCI) was calculated for the facility. Each Clinical Category Cost Index was weighted by that facility's own volume and facility costs to calculate a composite measure of cost called the Composite Facility Cost Index.

Composite Facility Cost Indices (CompFCI) for each facility, calculated using the UCL of individual clinical category facility cost indices (CCFI), were then compared to the cost threshold set by BCBSA. A facility was selected for BDC+ designation if the CompFCI was lower than or equal to the cost threshold set by BCBSA. For Knee and Hip Replacement 2025, the cost index threshold set by BCBSA is the Plan Cost Index. The Plan Cost Index offers local differentiation and varies by State, to reflect relative cost efficiencies within each Blue Plan's Service Area.

Questions

Contact your local Blue Plan with any questions.

Blue Distinction Centers (BDC) met overall quality measures for patient safety and outcomes, developed with input from the medical community. A Local Blue Plan may require additional criteria for facilities located in its own service area; for details, contact your Local Blue Plan. Blue Distinction Centers+ (BDC+) also met cost measures that address consumers' need for affordable health care. Each facility's cost of care is evaluated using data from its Local Blue Plan. Facilities in CA, ID, NY, PA, and WA may lie in two Local Blue Plans' areas, resulting in two evaluations for cost of care; and their own Local Blue Plans decide whether one or both cost of care evaluation(s) must meet BDC+ national criteria. National criteria for BDC and BDC+ are displayed on www.bcbs.com. Individual outcomes may vary. For details on a facility's in-network status or your own policy's coverage, contact your Local Blue Plan and ask your facility before making an appointment.

Neither Blue Cross and Blue Shield Association nor any Blue Plans are responsible for non-covered charges or other losses or damages resulting from Blue Distinction or other provider finder information or care received from Blue Distinction or other providers.

Appendix

Table 9: Knee and Hip Replacement Trigger Medical Codes

Clinical Category	Code Type	Code	Description
Total Knee Replacement	CPT	27445	Arthroplasty, knee, hinge prosthesis (e.g., Walldius type)
Total Knee Replacement	CPT	27447	Arthroplasty, knee, condyle and plateau; medial AND lateral compartments with or without patella resurfacing (total knee arthroplasty)
Total Knee Replacement	ICD-10	0SRD069	Replacement of Left Knee Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Cemented, Open Approach
Total Knee Replacement	ICD-10	0SRD06A	Replacement of Left Knee Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Uncemented, Open Approach
Total Knee Replacement	ICD-10	0SRD06Z	Replacement of Left Knee Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Open Approach
Total Knee Replacement	ICD-10	0SRD0J9	Replacement of Left Knee Joint with Synthetic Substitute, Cemented, Open Approach
Total Knee Replacement	ICD-10	0SRD0JA	Replacement of Left Knee Joint with Synthetic Substitute, Uncemented, Open Approach
Total Knee Replacement	ICD-10	0SRD0JZ	Replacement of Left Knee Joint with Synthetic Substitute, Open Approach
Total Knee Replacement	ICD-10	0SRD07Z	Replacement of Left Knee Joint with Autologous Tissue Substitute, Open Approach
Total Knee Replacement	ICD-10	0SRD0EZ	Replacement of Left Knee Joint with Articulating Spacer, Open Approach
Total Knee Replacement	ICD-10	0SRD0KZ	Replacement of Left Knee Joint with Nonautologous Tissue Substitute, Open Approach
Total Knee Replacement	ICD-10	0SRC069	Replacement of Right Knee Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Cemented, Open Approach
Total Knee Replacement	ICD-10	0SRC06A	Replacement of Right Knee Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Uncemented, Open Approach
Total Knee Replacement	ICD-10	0SRC06Z	Replacement of Right Knee Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Open Approach
Total Knee Replacement	ICD-10	0SRC0J9	Replacement of Right Knee Joint with Synthetic Substitute, Cemented, Open Approach
Total Knee Replacement	ICD-10	0SRC0JA	Replacement of Right Knee Joint with Synthetic Substitute, Uncemented, Open Approach
Total Knee Replacement	ICD-10	0SRC0JZ	Replacement of Right Knee Joint with Synthetic Substitute, Open Approach
Total Knee Replacement	ICD-10	0SRC07Z	Replacement of Right Knee Joint with Autologous Tissue Substitute, Open Approach
Total Knee Replacement	ICD-10	0SRC0EZ	Replacement of Right Knee Joint with Articulating Spacer, Open Approach
Total Knee Replacement	ICD-10	0SRC0KZ	Replacement of Right Knee Joint with Nonautologous Tissue Substitute, Open Approach
Total Hip Replacement	CPT	27130	Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip arthroplasty), with or without autograft or allograft
Total Hip Replacement	CPT	27132	Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft

Clinical Category	Code Type	Code	Description
Total Hip Replacement	ICD-10	0SR9019	Replacement of Right Hip Joint with Metal Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SR901A	Replacement of Right Hip Joint with Metal Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SR901Z	Replacement of Right Hip Joint with Metal Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SR9029	Replacement of Right Hip Joint with Metal on Polyethylene Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SR902A	Replacement of Right Hip Joint with Metal on Polyethylene Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SR902Z	Replacement of Right Hip Joint with Metal on Polyethylene Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SR9039	Replacement of Right Hip Joint with Ceramic Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SR903A	Replacement of Right Hip Joint with Ceramic Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SR903Z	Replacement of Right Hip Joint with Ceramic Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SR9049	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SR904A	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SR904Z	Replacement of Right Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SR9069	Replacement of Right Hip Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SR906A	Replacement of Right Hip Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SR906Z	Replacement of Right Hip Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SR90J9	Replacement of Right Hip Joint with Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SR90JA	Replacement of Right Hip Joint with Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SR90JZ	Replacement of Right Hip Joint with Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SR907Z	Replacement of Right Hip Joint with Autologous Tissue Substitute, Open Approach
Total Hip Replacement	ICD-10	0SR90EZ	Replacement of Right Hip Joint with Articulating Spacer, Open Approach
Total Hip Replacement	ICD-10	0SR90KZ	Replacement of Right Hip Joint with Nonautologous Tissue Substitute, Open Approach
Total Hip Replacement	ICD-10	0SRB019	Replacement of Left Hip Joint with Metal Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SRB01A	Replacement of Left Hip Joint with Metal Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SRB01Z	Replacement of Left Hip Joint with Metal Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SRB029	Replacement of Left Hip Joint with Metal on Polyethylene Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SRB02A	Replacement of Left Hip Joint with Metal on Polyethylene Synthetic Substitute, Uncemented, Open Approach
Total Hip	ICD-	0SRB02Z	Replacement of Left Hip Joint with Metal on Polyethylene Synthetic

Clinical Category	Code Type	Code	Description
Replacement	10		Substitute, Open Approach
Total Hip Replacement	ICD-10	0SRB039	Replacement of Left Hip Joint with Ceramic Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SRB03A	Replacement of Left Hip Joint with Ceramic Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SRB03Z	Replacement of Left Hip Joint with Ceramic Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SRB049	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SRB04A	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SRB04Z	Replacement of Left Hip Joint with Ceramic on Polyethylene Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SRB069	Replacement of Left Hip Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SRB06A	Replacement of Left Hip Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SRB06Z	Replacement of Left Hip Joint with Oxidized Zirconium on Polyethylene Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SRB0J9	Replacement of Left Hip Joint with Synthetic Substitute, Cemented, Open Approach
Total Hip Replacement	ICD-10	0SRB0JA	Replacement of Left Hip Joint with Synthetic Substitute, Uncemented, Open Approach
Total Hip Replacement	ICD-10	0SRB0JZ	Replacement of Left Hip Joint with Synthetic Substitute, Open Approach
Total Hip Replacement	ICD-10	0SRB07Z	Replacement of Left Hip Joint with Autologous Tissue Substitute, Open Approach
Total Hip Replacement	ICD-10	0SRB0EZ	Replacement of Left Hip Joint with Articulating Spacer, Open Approach
Total Hip Replacement	ICD-10	0SRB0KZ	Replacement of Left Hip Joint with Nonautologous Tissue Substitute, Open Approach

Table 10: Knee and Hip Replacement Geographic Adjustment Factor (GAF)

State	GAF Region	GAF
AK	ALASKA*	1.271
AL	ALABAMA	0.923
AR	ARKANSAS	0.916
AZ	ARIZONA	0.983
CA	BAKERSFIELD	1.037
CA	CHICO	1.031
CA	EL CENTRO	1.032
CA	FRESNO	1.031
CA	LOS ANGELES-LONG BEACH-ANAHEIM (LOS ANGELES/ORANGE CNTY)	1.097
CA	MADERA	1.031
CA	MERCED	1.031

State	GAF Region	GAF
CA	MODESTO	1.031
CA	NAPA	1.151
CA	OXNARD-THOUSAND OAKS-VENTURA	1.082
CA	REDDING	1.031
CA	REST OF CALIFORNIA	1.031
CA	REST OF OREGON	0.979
CA	RIVERSIDE-SAN BERNARDINO-ONTARIO	1.045
CA	SACRAMENTO-ROSEVILLE-FOLSOM	1.070
CA	SALINAS	1.075
CA	SAN FRANCISCO-OAKLAND-BERKELEY (MARIN CNTY)	1.213
CA	SAN FRANCISCO-OAKLAND-BERKELEY (SAN FRANCISCO/SAN MATEO/ALAMEDA/CONTRA COSTA CNTY)	1.212
CA	SAN JOSE-SUNNYVALE-SANTA CLARA (SAN BENITO CNTY)	1.230
CA	SAN JOSE-SUNNYVALE-SANTA CLARA (SANTA CLARA CNTY)	1.224
CA	SAN LUIS OBISPO-PASO ROBLES	1.049
CA	SANTA CRUZ-WATSONVILLE	1.085
CA	SANTA MARIA-SANTA BARBARA	1.072
CA	SANTA ROSA-PETALUMA	1.101
CA	STOCKTON	1.031
CA	VALLEJO	1.149
CA	VISALIA	1.031
CA	YUBA CITY	1.031
CO	COLORADO	1.021
CT	CONNECTICUT	1.062
DC	DC + MD/VA SUBURBS	1.123
DE	DELAWARE	0.999
FL	FORT LAUDERDALE	1.031
FL	MIAMI	1.075
FL	REST OF FLORIDA	0.992
GA	ATLANTA	1.004
GA	REST OF GEORGIA	0.952
HI	HAWAII, GUAM	1.050
IA	IOWA	0.938
ID	IDAHO	0.936
IL	CHICAGO	1.056
IL	REST OF ILLINOIS	0.976
IL	SUBURBAN CHICAGO	1.048
IN	INDIANA	0.943
KS	KANSAS	0.938

State	GAF Region	GAF
KY	KENTUCKY	0.940
LA	NEW ORLEANS	0.977
LA	REST OF LOUISIANA	0.945
MA	METROPOLITAN BOSTON	1.106
MA	REST OF MASSACHUSETTS	1.028
MD	BALTIMORE/SURR. CNTYS	1.058
MD	REST OF MARYLAND	1.012
ME	REST OF MAINE	0.946
ME	SOUTHERN MAINE	0.991
MI	DETROIT	1.025
MI	REST OF MICHIGAN	0.967
MN	MINNESOTA	0.982
MO	EAST ST. LOUIS	0.996
MO	METROPOLITAN KANSAS CITY	0.976
MO	METROPOLITAN ST. LOUIS	0.978
MO	REST OF MISSOURI	0.935
MS	MISSISSIPPI	0.923
MT	MONTANA	0.999
NC	NORTH CAROLINA	0.952
ND	NORTH DAKOTA	0.980
NE	NEBRASKA	0.933
NH	NEW HAMPSHIRE	1.011
NJ	NORTHERN NJ	1.112
NJ	REST OF NEW JERSEY	1.072
NM	NEW MEXICO	0.965
NV	NEVADA	0.994
NY	MANHATTAN	1.136
NY	NYC SUBURBS/LONG ISLAND	1.162
NY	POUGHKPSIE/N NYC SUBURBS	1.082
NY	QUEENS	1.141
NY	REST OF NEW YORK	0.966
OH	OHIO	0.961
OK	OKLAHOMA	0.942
OR	PORTLAND	1.041
PA	METROPOLITAN PHILADELPHIA	1.043
PA	REST OF PENNSYLVANIA	0.964
PR	PUERTO RICO	1.002
RI	RHODE ISLAND	1.024
SA	SAN DIEGO-CHULA VISTA-CARLSBAD	1.083

State	GAF Region	GAF
SC	SOUTH CAROLINA	0.953
SD	SOUTH DAKOTA	0.974
TN	TENNESSEE	0.933
TX	AUSTIN	1.018
TX	BEAUMONT	0.954
TX	BRAZORIA	1.001
TX	DALLAS	1.004
TX	FORT WORTH	1.000
TX	GALVESTON	1.001
TX	HANFORD-CORCORAN	1.031
TX	HOUSTON	1.026
TX	REST OF TEXAS	0.972
UT	UTAH	0.967
VA	VIRGINIA	0.984
VI	VIRGIN ISLANDS	1.002
VT	VERMONT	0.977
WA	REST OF WASHINGTON	1.014
WA	SEATTLE (KING CNTY)	1.116
WI	WISCONSIN	0.953
WV	WEST VIRGINIA	0.951
WY	WYOMING	0.989