BlueCross BlueShield Association

BlueDistinction®
Specialty Care

Program Selection Criteria: Knee and Hip Replacement

Revised August 2019

About This Document

The Program Selection Criteria outlines the selection criteria and evaluation process used to determine eligibility for the Blue Distinction Centers for Knee and Hip Replacement program (the Program).

This document is organized into five sections:

1. Overview of the Blue Distinction Specialty Care Program
2. Evaluation Process and Data Sources
3. Quality Selection Criteria
4. Business Selection Criteria
5. Cost of Care Selection Criteria

About the Blue Distinction Specialty Care Program

Blue Distinction Specialty Care is a national designation program, awarded by local Blue Cross and/or Blue Shield (BCBS) companies, recognizing healthcare providers that demonstrate expertise in delivering quality and affordable health care to meet consumers' specialty care needs—safely, effectively and cost-efficiently.

The goal of the program is to help consumers find both quality and value for their specialty care needs, while encouraging healthcare professionals to improve the overall quality and delivery of care nationwide, and providing a credible foundation for local Blue Cross and/or Blue Shield Plans (Blue Plans) to design benefits tailored to meet employers' own quality and cost objectives[1]. The Blue Distinction Specialty Care Program includes two levels of designation:

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

Quality is key: only those providers that first meet nationally established quality measures for BDC will be considered for designation as a BDC+.

Executive Summary

The Blue Distinction Centers for Knee and Hip Replacement designation is 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 are not designated collectively. The Program includes patients 18 years of age or older who had a total knee or total hip replacement procedure. The Program is expanding to include additional sites of service. A Provider can apply to achieve a Blue Distinction designation, as either a Hospital (with or without an onsite Intensive Care Unit [ICU]) or an Ambulatory Surgery Center (ASC).

- Hospitals (with or without an onsite ICU) will be evaluated based on data sourced from the Provider Survey as 'self-reported,' publicly available Hospital Compare data (for the most recent timeframe available), and Blue Plan Healthcare Claims data.

[1] Benefit design is determined independently by the local Blue Plan and is not a feature of any Blue Distinction program.

- ASCs will be evaluated based on data sourced from the Provider Survey as 'self-reported.' This Program requires ASCs to have an advanced orthopedic certification[2] that confirms important structure and process features to successfully perform total knee and total hip replacement surgery.
- Hospitals without an onsite ICU and ASCs have additional selection criteria for transferring to an acute care comprehensive inpatient facility that is able to provide a higher level of care to include an onsite ICU and is designated for the 2019 Blue Distinction Centers for Knee and Hip Replacement.

In early 2018, local Blue Plans invited 3,800+ providers across the country to be considered for the Knee and Hip Replacement designation under this Program; over 1,600+ providers applied and were evaluated on objective, transparent selection criteria with Quality, Business, and Cost of Care components.

Understanding the Evaluation Process

Selection Process

The selection process balances Quality, cost, and access considerations to offer consumers meaningful differentiation in Quality and value for specialty care providers that are designated as BDC and BDC+. Guiding principles for the selection process include:

Quality

Nationally consistent approach to evaluating quality and safety was used, incorporating quality measures with meaningful impact, including delivery system features and specific quality outcomes to which all can aspire.

Cost

Nationally consistent and objective approach for selecting BDC+ was used to address market and consumer demand for cost savings and affordable healthcare.

Access

Blue members' access to Blue Distinction Centers was considered, to achieve the Program's overall goal of providing differentiated performance on quality and, for the BDC+ designation, cost of care.

Data Sources

Objective data from a detailed Provider Survey, Third Party Registry Data, Plan Survey and Blue Plans' Healthcare Claims data information were used to evaluate and identify providers that meet the Program's Selection Criteria. Table 1 below outlines the data sources used for evaluation under this Program.

Table 1: Data Sources

Evaluation Components	Data Source	Blue Distinction Centers (BDC)	Blue Distinction Centers+ (BDC+)
Quality	Information obtained from a provider in the Provider Survey	✓	✓

[2] Additional advanced orthopedic certifications will be reviewed independently for acceptance in the program.

	Publicly available data from Hospital Compare *(Hospitals Only)* Hospital Compare Blue Plan Claims Data *(Hospitals Only)*		
Business	Information obtained from the local Blue Plan in the Plan Survey and Blue Brands evaluation.	✓	✓
Cost of Care	Blue Plan Healthcare Claims Data.		✓

Measurement Framework

Blue Distinction Specialty Care programs establish a nationally consistent approach to evaluating quality and safety by incorporating quality measures with meaningful impact. Selection Criteria continue 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 value-based initiatives were developed using the following guiding principles:

- Align with credible, transparent, nationally established measures with an emphasis on proven outcomes, where appropriate and feasible.
- Utilize nationally consistent measurement approaches, which recognize the value added by local market initiatives.
- Apply a fair and equitable evaluation approach that consistently identifies providers with meaningfully differentiated quality and (where relevant) cost.
- Achieve competitive geographic access with footprints that can advance over time.
- Create a nationally consistent market viable solution which is operationally feasible and scalable over time.

Quality Selection Criteria

Providers were evaluated on quality metrics developed through a process that included: input from the medical community and quality measurement experts; review of medical literature, together with national quality and safety initiatives; and a thorough analysis of meaningful quality measures. The quality evaluation was based on provider responses to the Provider Survey, publicly available Hospital Compare (hospitals only) data, and Blue Healthcare Claims (hospitals only) data.

The Quality Selection Criteria includes structure, process, and outcome metrics specific to Knee and Hip Replacements. Most measures were analyzed using a confidence interval (CI) of 90 or 95 percent (dependent on measure) around the point estimate (e.g., observed rate). A 95 percent CI is used in the Hospital Compare Measures and a 90 percent CI is used in self-reported calculated measures. “Confidence Interval” is a term used in statistics that measures the probability that a result will fall between two set values, Lower Confidence Limit (LCL) and Upper Confidence Limit (UCL). The lower confidence limit (LCL) was used in the evaluation for the majority of measures. The LCL was compared to the National Selection Criteria thresholds where lower results represent better performance (e.g., lower mortality is better). Other metrics, where a CI was not calculated, were compared against the Selection Criteria threshold (e.g., volumes and accreditation).

Table 2 below translates CI results into “meets criteria” or “does not meet criteria” categories.

Table 2 –Lower Confidence Limit (LCL) Evaluation: Lower Results are Better

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

Table 3: Quality Selection Criteria for Hospitals with or without an ICU

Table 3 below identifies the Quality Selection Criteria used in the evaluation for hospitals with or without an onsite ICU. **Hospitals** (with or without an onsite ICU) must meet all of the Quality Selection Criteria outlined in Table 3. **Hospitals without an onsite ICU** have Additional Quality Selection Criteria that must be met around patient transfers. Lastly, there are informational metrics given as feedback for awareness and quality improvement to **all hospitals** (with or without an onsite ICU).

Hospitals (with or without an onsite ICU) must have the publicly available Hospital Compare data and must meet the National Threshold for both measures: Hospital-level 30-day, all-cause risk-standardized readmission rate (RSRR) and Hospital-level risk-standardized complication rate (RSCR).

The Hospital Compare methodology for the RSRR and RSCR measures were applied to the commercial population for patients under the age of 65 using Blue Plan Healthcare Claims data for the time period of 1/1/2015 – 12/31/2017. Hospitals (with or without an onsite ICU) that meet the analytic volume of at least 25 primary total knee and/or total hip replacements were evaluated for each measure. The analytic volume may differ between the two measures (RSRR and RSCR) due to exclusions in the methodology. If a hospital is evaluated for the claims measure, then they must meet the National Threshold for that measure. If the hospital does not meet the analytic volume of at least 25 claims, then that measure will not be evaluated.

Table 4: Quality Selection Criteria for Ambulatory Surgery Centers (ASC)

Table 4 below identifies the Quality Selection Criteria used in the evaluation for ambulatory surgery centers (ASCs). **ASCs** must meet all of the Quality Selection Criteria outlined in Table 4. In addition, there are Informational Metrics given as feedback for awareness and quality improvement.

ASCs must also obtain an advanced orthopedic certification. Currently there are four organizations offering an advanced orthopedic certification, but others may be evaluated for inclusion as they are developed. An advanced orthopedic certification confirms important structure and process features that the program has in place to successfully perform total knee and total hip replacement surgery in an outpatient setting.

ALL facilities must meet the Quality Selection Criteria requirements as well as all Business Selection Criteria (outlined below in Table 5) to be considered eligible for the Blue Distinction Centers for Knee and Hip Replacement

designation.

Table 3 – Quality Selection Criteria for Hospitals with or without an Onsite ICU

Quality Selection Criteria for Hospital with or without an Onsite ICU (Hospitals must meet ALL of the following Selection Criteria to be eligible)		
Metric Name	**Source**	**Quality Selection Criteria**
National Accreditation*	Provider Survey Q#6	The provider is fully accredited by **at least one** of the following national accreditation organizations*: • The Joint Commission (TJC) (without provision or condition) in the Hospital Accreditation Program. • Healthcare Facilities Accreditation Program (HFAP) of the American Association for Hospital and Health Systems (AAHHS) as an acute care hospital. • DNV GL Healthcare in the National Integrated Accreditation Program (NIAHO®) Hospital Accreditation Program. • Center for Improvement in Healthcare Quality (CIHQ) in the Hospital Accreditation Program. **NOTE: To enhance quality while improving BCBS members' access to qualified providers, alternate 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 provider's local Blue Plan.*
Hospital Compare Knee/Hip Readmission Rate (RSRR)	**Hospital Compare Publicly Available Measures** (Data from January 2018)	Hospital-level 30-day, all-cause risk-standardized readmission rate (RSRR) following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 95% **lower confidence limit (LCL) is less than or equal to 3.30.** *(must be present)*
Hospital Compare Knee/Hip Complication Rate (RSCR)		Hospital-level 30 days risk-standardized complication rate (RSCR) following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 95% **lower confidence limit (LCL) is less than or equal to 2.20.** *(must be present)*
Informational Blue Claims Quality Measures**		
Blue Claims Knee/Hip Readmission Rate	**Blue Plan Healthcare Claims Data** (Data from 1/1/2015 – 12/31/2017)	Hospital-level 30-day, all-cause risk-standardized readmission rate (RSRR) following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 95% **lower confidence limit (LCL) is less than or equal to 3.30 or Insufficient Data Allowed.**
Blue Claims Knee/Hip Complication Rate		Hospital-level 30 day risk-standardized complication rate (RSCR) following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 95% **lower confidence limit (LCL) is less than or equal to 0.80 or Insufficient Data Allowed.**

**A local coding inconsistency was identified that could have had the unintended outcome of affecting these measures'

results. In fairness to all, scoring of these quality claims criteria will be reported as *informational only* at this time. This coding inconsistency only pertained to quality claims measures, and did not impact the claims data used for cost evaluation. Providers who met these two quality claims criteria originally have no action items at this time. Providers who did not meet the Blue Claims Readmission and/or Complication quality measures originally will be re-evaluated.

Additional Selection Criteria for Hospitals without an Onsite ICU **(Hospitals without an onsite ICU must meet all of the following Additional Selection Criteria, in addition to the Selection Criteria noted above.)**		
Metric Name	**Source**	**Quality Selection Criteria**
Written Patient Selection Criteria	Provider Survey Question #8	Hospitals without an onsite ICU utilize **written patient selection criteria** for total knee and total hip replacement procedures, developed by a multi-disciplinary team of physicians and staff that is specific to the site of service and to the types of patients that are treated.
Written Transfer Agreement	Provider Survey Question #9	Hospitals without an onsite ICU have a **written transfer agreement** with a facility (ies) equipped to provide a higher level of care (that includes an onsite ICU), with the appropriate resources for total knee and total hip replacement patients.
Transfer Rate	Provider Survey Question #10	Hospitals without an onsite ICU 30-day, post-operative primary total knee and total hip replacement patient transfer rates' **90% lower confidence limit (LCL) is less than or equal to 2.00**. For patients transferred to a facility equipped to provide a higher level of care (that includes an onsite ICU), with the appropriate resources for total knee and total hip replacement patients
Inpatient Transfer Facility Blue Distinction Center for Knee and Hip Replacement Designation(s)	Part 2: Transfer Facility Table	**All inpatient facility (ies)** with transfer agreement(s) to receive total knee and total hip replacement patients from the hospitals without onsite ICU is/are currently **designated** as a Blue Distinction Centers for Knee and Hip Replacement for the 2019 designation cycle.

Informational Metrics for Hospitals with or without an Onsite ICU **(Informational Metrics are provided as feedback for awareness and quality improvement)**		
Metric Name	**Source**	**Informational Quality Selection Criteria**
Shared Decision Making	Provider Survey Question #36	Utilizes a patient-centered shared decision making process.
	Provider Survey Question #37	Staff who are responsible for shared decision making received training.
	Provider Survey Question #38	Systematically collects information in order to measure and improve decision making.

Informational Metrics for Hospitals with or without an Onsite ICU (Informational Metrics are provided as feedback for awareness and quality improvement)		
Metric Name	**Source**	**Informational Quality Selection Criteria**
	Provider Survey Question #39	Facility uses a Shared Decision Making model or process addressing pain management that includes patient expectations and non-opioid treatment options in their total knee and total hip replacement program.
Opioid Practices	Provider Survey Question #40	Actions the facility is taking to reduce opioid use for post-operative pain management in their total knee and total hip replacement program: • Opioid-free post-operative pain management options • Written protocols to reduce the use of opioids in post-operative pain management • Written protocols to reduce opioid prescriptions upon discharge • Steering Committee charged with reducing the use and prescribing of opioids
Opioid-Free Discharge Rate	Provider Survey Question #41	Percent of post-operative primary total knee arthroplasty (TKA) and total hip arthroplasty (THA) patients opioid free upon discharge.
Functional Assessments	Provider Survey Question #43	Routinely uses a nationally recognized functional assessment tool to evaluated total knee and total hip replacement patients.
	Provider Survey Question #45	Routinely collect and report pre-operative and/or post-operative functional assessment patient outcomes for your total knee and total hip replacement patients.

Table 4 – Quality Selection Criteria for Ambulatory Surgery Centers

Quality Selection Criteria for Ambulatory Surgery Centers (ASCs must meet ALL of the following Quality Selection Criteria to be eligible)		
Metric Name	**Source**	**Quality Selection Criteria**
National Accreditation*	Provider Survey Question #11	The ASC is fully accredited by **at least one** of the following national accreditation organizations: • The Joint Commission (TJC) in the Ambulatory Care Accredited Program • Healthcare Facilities Accreditation Program (HFAP) of the Accreditation Association for Hospitals and Health Systems (AAHHS) as an Ambulatory Surgical Center • American Association for Accreditation of Ambulatory Surgery Facilities--Surgical (AAAASF) • Accreditation Association for Ambulatory Health Care (AAAHC) as an Ambulatory Surgery Center • Institute for Medical Quality (IMQ) in the Ambulatory Accreditation Program **NOTE:* To enhance quality while improving BCBS members' access to qualified providers, alternate 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 provider's local Blue Plan.*
Advanced Orthopedic Certification**	Provider Survey Question #12	The ASC has an advanced orthopedic certification by **at least one** of the following organizations: • Accreditation Association for Ambulatory Health Care (AAAHC) Advanced Orthopaedic Certification • The Joint Commission's (TJC) Advanced Certification for Total Hip and Total Knee Replacement. www.jointcommission.org • Healthcare Facilities Accreditation Program (HFAP) Advanced Joint Replacement Certification with Distinction • National Integrated Accreditation Program (NIAHO℠)—Acute Care of DNV GL Healthcare Hip & Knee Replacement Certification (HKRC) ***Note**: Additional advanced orthopedic certifications will be reviewed independently for acceptance in the program.*
Total ASC Patient Volume	Provider Survey Question #19	Volume is **at least 25** primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) patients.
Unplanned Inpatient Admission Rate	Provider Survey Question #24	Primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 30 day unplanned inpatient admission rate's **90% lower confidence limit (LCL) is less than or equal to 1.00.**
Surgical Site Bleeding Rate	Provider Survey Question #25	Primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 30 day surgical site bleeding rate's **90% lower confidence limit (LCL) is less than or equal to 1.00.**

Quality Selection Criteria for Ambulatory Surgery Centers (ASCs must meet ALL of the following Quality Selection Criteria to be eligible)		
Metric Name	**Source**	**Quality Selection Criteria**
Re-operation Rate	Provider Survey Question #28	Primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 30 day reoperation rate's **90% lower confidence limit (LCL) is less than or equal to 1.00.**
Mechanical Complication Rate	Provider Survey Question #29	Primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 90 day mechanical complication rate's **90% lower confidence limit (LCL) is less than or equal to 1.00.**
Wound Infection/ Periprosthetic Joint Infection Rate	Provider Survey Question #30	Primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) 90 day wound infection/periprosthetic joint infection rate's **90% lower confidence limit (LCL) is less than or equal to 1.00.**
Written Patient Selection Criteria	Provider Survey Question #13	Ambulatory Surgery Centers utilize **written patient selection criteria** for total knee and total hip replacement procedures, developed by a multi-disciplinary team of physicians and staff that is specific to the site of service and to the types of patients that are treated.
Written Transfer Agreement	Provider Survey Question #14	Ambulatory Surgery Centers have a **written transfer agreement** with a facility (ies) equipped to provide a higher level of care (that includes an onsite ICU), with the appropriate resources for total knee and total hip replacement patients.
Transfer Rate	Provider Survey Question #15	Ambulatory Surgery Centers 30-day, post-operative primary total knee and total hip replacement patient transfer rate **90% lower confidence limit (LCL) is less than or equal to 2.00**. For patients transferred to a facility equipped to provide a higher level of care (that includes an onsite ICU), with the appropriate resources for total knee and total hip replacement patients.
Inpatient Transfer Facility Blue Distinction Center for Knee and Hip Replacement Designation(s)	Part 2: Transfer Facility Table	**All inpatient facility (ies)** with transfer agreement(s) to receive total knee and total hip replacement patients from the ambulatory surgery center is/are currently **designated** as a Blue Distinction Centers for Knee and Hip Replacement for the 2019 designation cycle.

Informational Metrics for Ambulatory Surgery Centers (Informational Metrics are provided as feedback for awareness and quality improvement)		
Metric Name	**Source**	**Informational Quality Selection Criteria**
Shared Decision Making	Provider Survey Question #36	Utilizes a patient-centered shared decision making process.

Informational Metrics for Ambulatory Surgery Centers (Informational Metrics are provided as feedback for awareness and quality improvement)		
Metric Name	**Source**	**Informational Quality Selection Criteria**
	Provider Survey Question #37	Staff who are responsible for shared decision making received training.
	Provider Survey Question #38	Systematically collects information in order to measure and improve decision making.
	Provider Survey Question #39	Facility uses a Shared Decision Making model or process addressing pain management that includes patient expectations and non-opioid treatment options in their total knee and total hip replacement program.
Opioid Practices	Provider Survey Question #40	Actions the facility is taking to reduce opioid use for post-operative pain management in their total knee and total hip replacement program: • Opioid-free post-operative pain management options • Written protocols to reduce the use of opioids in post-operative pain management • Written protocols to reduce opioid prescriptions upon discharge • Steering Committee charged with reducing the use and prescribing of opioids
Opioid-Free Discharge Rate	Provider Survey Question #41	Percent of post-operative primary total knee arthroplasty (TKA) and total hip arthroplasty (THA) patients opioid free upon discharge.
Functional Assessments	Provider Survey Question #43	Routinely uses a nationally recognized functional assessment tool to evaluated total knee and total hip replacement patients.
	Provider Survey Question #45	Routinely collect and report pre-operative and/or post-operative functional assessment patient outcomes for your total knee and total hip replacement patients.

Business Selection Criteria

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

1. Provider Participation;
2. Physician and Surgeon Participation;
3. Blue Brands Criteria; and
4. Local Blue Plan Criteria (if applicable)

A provider 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.

Table 5: Business Selection Criteria

Business Selection Criteria	
Provider Participation	All providers are required to participate in the local Blue Plan's BlueCard Preferred Provider Organization (PPO) Network.
Physician Medical and Surgical Specialists Participation	All physician specialists identified in the Provider Survey are required to participate in the local Blue Plan's BlueCard PPO Network.
Blue Brands Criteria	Provider and its corporate family meets 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 providers located within its Service Area.

Note: For future designations, Blue Distinction Specialty Care may require all hospital-based physicians (emergency physicians, radiologists, pathologists, anesthesiologists, hospitalists, and intensivists) who provide services related to specialty care procedures (e.g., for total knee and/or hip replacement procedures) to participate in the local Blue Plan's BlueCard Preferred Provider Organization (PPO) Network, in order for the Provider facility to receive the designation.

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

Cost of Care Selection Criteria

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

> ***Quality is key:*** only those providers that first meet nationally established, objective quality measures for BDC will be considered for designation as a BDC+.

Cost Data Sources and Defining the Episodes

Cost of Care evaluation was based on a nationally consistent claims analysis of Blue Plan healthcare claims data. The scope of this analysis included:

- Claims were evaluated using adjusted allowed amounts derived from Blue Plan healthcare claims data from January 1, 2016 through December 31, 2017, and paid through March 31, 2018.
- Total knee and total hip replacement episodes with commonly used and clinically comparable primary diagnoses and most typical MS-DRGs are included within each clinical category, i.e., diagnosis of

osteoarthritis.

- Total knee and total hip replacement episodes were identified through a trigger procedure (or index event) for each clinical category by CPT, HCPCS, or ICD-9 (before 10/1/2015), and ICD-10 (on or after 10/1/2015) procedure codes and were placed in one of two clinical categories:
    - Total Knee Replacement (osteoarthritis)
    - Total Hip Replacement (osteoarthritis and aseptic necrosis)

- Adjusted allowed amounts for professional and in-network provider claims were included for total knee replacement and total hip replacement clinical categories for actively enrolled commercial BCBS members.
- Member Exclusion Criteria:
    - No data was evaluated for members under 18 and over 64 years of age;
    - Members whose primary payer is not a Blue Plan;
    - Members not continuously enrolled for the duration of the episode; or
    - Members with a discharge status of Left Against Medical Advice (AMA) or in-hospital death.
- The episode window for total knee and total hip replacement begins 30 days prior to the date of admission of the index admission (look back period) and ends 90 days following discharge from the index admission (look forward period). Episodes will be included in the analysis only if the member is continuously eligible for relevant (primarily PPO) BCBS benefits throughout the episode duration. The episode window includes services from provider, physician, other professional, and ancillary providers.
    - The **30 day look back** period includes relevant services (a service presumed related to the episode, regardless of diagnosis) and relevant diagnoses (other conditions and symptoms directly relevant to the episode).
    - The **index admission** includes all costs during the admission (i.e., provider, physician, other professional, and ancillary costs).
    - The **90 day look forward** period includes relevant services (a service presumed related to the episode, regardless of diagnosis), relevant diagnoses (other conditions and symptoms directly relevant to the episode), and complications (identified based on relevant diagnosis).
- For providers located in overlapping areas served by more than one local Blue Plan, the same method for cost evaluation was used but the claims data and results were evaluated separately for each of those local Blue Plans, except in limited cases where the more expensive result takes precedence.

Adjusting Episode Costs

Provider episode costs were analyzed and adjusted separately for each clinical category (i.e., total knee replacements and total hip replacements) as follows:

A geographic adjustment factor (CMS Geographic Adjustment Factors [GAF]) was applied to the episode cost, **to account for geographic cost variations in delivering care.**

Risk adjustment was used to adjust for variation in cost that may relate to differences in patient severity (with or without comorbidity), as well as case mix, using the following steps: **-DRG risk stratification system.**

- Created separate risk bands within episodes, based on patient severity level, case mix, and gender. Only one age band, 18-64 years, was used for all patients.
- Managed outliers through winsorization within risk bands. Outliers were identified in each risk band as those

values for which geographically adjusted costs were the top 2 percent and bottom 2 percent of episode costs. Outlying cost values were truncated to these points, to preserve their considerations in calculating the overall episode cost estimate, while moderating their influence.

- Calculated a Risk Ratio for each risk band by taking the mean of the episode costs within each risk band and dividing it by the overall mean episode cost for the relevant clinical category.
- The Risk Adjustment Factor (which is the inverse of the Risk Ratio) is multiplied by each provider's geographically adjusted provider 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 the Cost Measure

Each provider being evaluated has a number of surgery episodes attributed to that provider, based on the trigger events that occurred at that provider for each of the two clinical categories: knee replacement and hip replacement. For each clinical category, the median value of the adjusted expected episode costs for that provider is called the Clinical Category Cost (CCC). Each provider will have a separate calculation for the Clinical Category Cost for Knee Replacement (CCC_1) and Hip Replacement (CCC_2).

Confidence intervals (90 percent) were calculated around each Clinical Category Cost (CCC) measure; the Upper Confidence Limit of the CCC for a specific Clinical Category was divided by the national median episode cost for the Clinical Category to become the Clinical Category Cost Index (CCCI).

Using each of the Clinical Category Cost Index (CCCI) values, an overall Composite Cost Index (CompCI) was calculated for the provider. Each CCCI was weighted by that provider's own volume and provider costs to calculate a composite measure of cost called the Composite Cost Index (CompCI). The CompCI was then rounded down to the nearest 0.025 for each provider to give the 'benefit of the doubt' to providers whose evaluation falls close to the threshold. The CompCI was then divided by the national median to normalize/standardize the values. While this does not change the results in any way, it allows for greater transparency by having a CompCI of 1.0 equivalent to the national median with values greater than 1.0 indicating more expensive providers and values less than 1.0 indicating more efficient providers. In the final step, the CompCI was compared to the National Cost Selection Criteria to achieve the final cost evaluation decision.

Minimum Case Volume Requirement

For reliability, minimum of 5 procedures was required within a clinical category for that data to be included in the calculation of Composite Cost Index (CompCI) for a facility. There are no minimum volumes for individual providers at the sub-category level, only the rolled up total cases per clinical category. Any provider that did not meet these episode minimums did not meet the Cost of Care Selection Criteria

Cost of Care Selection Criteria

In addition to meeting the nationally established, objective Quality and Business Selection Criteria, for Blue Distinction Centers, a facility also must meet **all** of the following Cost of Care Selection Criteria (Table 6) requirements to be considered eligible for the Blue Distinction Centers+ (BDC+) designation.

Table 6 – Cost of Care Selection Criteria

Cost of Care Selection Criteria	
Metric Name	**Selection Criteria Description**

BDC+ Episode Volume for Hospital with/without ICU	A hospital must have **5 or more** matched episodes of cost data in the Total Knee Replacement clinical category AND must have **5 or more** matched episodes of cost data in the Total Hip Replacement clinical category.
BDC+ Episode Volume for Ambulatory Surgery Centers	An ambulatory surgery center must have **5 or more** matched episodes of cost data in the Total Knee Replacement clinical category **AND/OR** must have **5 or more** matched episodes of cost data in the Total Hip Replacement clinical category.
BDC+ Composite Cost Index (ALL Facilities)	Composite Cost Index must be **lower than nationally established threshold of 1.125.**

Questions

Contact your local Blue Plan with any questions.

Blue Distinction Centers (BDC) met overall quality measures, developed with input from the medical community. A Local Blue Plan may require additional criteria for providers 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 healthcare. Each provider's cost of care is evaluated using data from its Local Blue Plan. Providers 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 provider's in-network status or your own policy's coverage, contact your Local Blue Plan and ask your provider 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.