BlueCross BlueShield Association

BlueDistinction®
Specialty Care

Program Selection Criteria: Spine Surgery

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About This Document

The Program Selection Criteria outlines the selection criteria and evaluation process used to determine eligibility for the Blue Distinction Centers for Spine Surgery 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 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 2019 Blue Distinction Centers for Spine Surgery includes patients 18 years of age or older who had elective spine surgery. The Program is expanding to include additional sites of service. Providers applied 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) and ASCs will be evaluated based on data sourced from the Provider Survey as self-reported.
- Hospitals without an onsite ICU and ASCs have additional criteria for transferring spine surgery patients to an acute care comprehensive inpatient facility that is able to provide a higher level of care, includes an onsite ICU, and is designated for the 2019 Blue Distinction Centers for Spine Surgery.

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

In early 2018, local Blue Plans invited 3,600+ providers across the country to be considered for the Spine Surgery designation under this Program; over 1,900+ 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

Data from a detailed Provider Survey, 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 Component	Data Source	Blue Distinction Centers (BDC)	Blue Distinction Centers+ (BDC+)
Quality	Information obtained from a provider in the Provider Survey.	✓	✓
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.

The Quality Selection Criteria includes structure, process, and outcome metrics specific to Spine Surgery. Provider metrics were analyzed using a confidence interval (CI) of 90 percent around the point estimate (e.g., observed rate). "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 of the clinical outcome 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).

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

Table 4 below identifies the Quality Selection Criteria used in the evaluation for 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.

All provider types (hospitals with or without an ICU and ASCs) must have an analytic volume of greater than or equal to 30 procedures in either of the two clinical categories: Primary 1 or 2 Level Lumbar Fusion + decompression for Spondylolisthesis and Primary 1 or 2 Level Anterior Cervical Fusion. Once the analytic volume is met for a clinical category, all provider types must meet the threshold for all clinical outcome metrics within that clinical category (4 metrics). Providers that meet the analytic volume for both clinical categories are evaluated on all the outcome metrics in both categories (8 metrics). The four clinical outcome measures are the same for both lumbar and cervical fusion:

- Reoperation of the primary procedure (90 day)
- Unplanned readmission (30 day)
- Venous thromboembolism (30 day)
- Surgical site infection (30 day)

All providers must meet the Quality Selection Criteria requirements as well as all Business Selection Criteria (outlined below in Table 5: Business Selection Criteria) to be considered eligible for the Blue Distinction Centers for Spine Surgery designation.

Table 3 – Quality Selection Criteria: Hospitals with and Without an ICU

Quality Selection Criteria for Hospitals 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 Question #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.*
Total Facility Procedure Volume	Provider Survey Question #27	The total facility spine surgery procedure volume is **at least 60**.
A facility must have an analytic volume of **greater than or equal to 30 procedures** in **either** of the two clinical categories (lumbar fusion or cervical fusion). • A facility must meet the analytic volume for one of the two clinical categories then meet the thresholds for **ALL** four (4) clinical outcome metrics within that clinical category. • A facility who meets the analytic volume for both clinical categories must meet the thresholds for **ALL** eight (8) clinical outcome metrics within both clinical categories.		
Primary Lumbar Fusion for Spondylolisthesis Patients Volume for Outcome Analysis	Provider Survey Question #28	Analytic volume for outcomes is **at least 30** spondylolisthesis patients who had a 1 or 2 level primary lumbar fusion +/- decompression.
Primary Lumbar Fusion for Spondylolisthesis Patient Reoperation Rate	Provider Survey Question #29	1 or 2 level primary lumbar fusion ± decompression for spondylolisthesis 90 day reoperation rate 90% lower confidence limit is **at or below 3.2.**
Primary Lumbar Fusion for Spondylolisthesis Patient Unplanned Readmission Rate	Provider Survey Question #30	1 or 2 level primary lumbar fusion ± decompression for spondylolisthesis unplanned 30 day readmission rate 90% lower confidence limit is **at or below 6.8.**
Primary Lumbar Fusion for Spondylolisthesis Patient VTE Rate	Provider Survey Question #31	1 or 2 level primary lumbar fusion + decompression for spondylolisthesis 30 day venous thromboembolism (VTE) rate 90% lower confidence limit is **at or below 1.28**.

Quality Selection Criteria for Hospitals with or without an Onsite ICU (Hospitals must meet ALL of the following Selection Criteria to be eligible)		
Metric Name	**Source**	**Quality Selection Criteria**
Primary Lumbar Fusion for Spondylolisthesis Patient SSI Rate	Provider Survey Question #32	1 or 2 level primary lumbar fusion + decompression for spondylolisthesis 30 day surgical site infection (SSI) rate 90% lower confidence limit is **at or below 5.4**.
Primary Anterior Cervical Fusion Patients Volume for Outcome Analysis	Provider Survey Question #33	Analytic volume for outcomes is **at least 30** patients who had a 1 or 2 level primary anterior cervical fusion.
Primary 1 or 2 Level Anterior Cervical Fusion Patient Reoperation Rate	Provider Survey Question #34	1 or 2 level primary anterior cervical fusion 90 day reoperation rate 90% lower confidence limit is **at or below 1.6**.
Primary 1 or 2 Level Anterior Cervical Fusion Patient Readmission Rate	Provider Survey Question #35	1 or 2 level primary anterior cervical fusion 30 day unplanned readmission rate 90% lower confidence limit is **at or below 4.0**.
Primary 1 or 2 Level Anterior Cervical Fusion Patient VTE Rate	Provider Survey Question #36	1 or 2 level primary anterior cervical fusion 30 day venous thromboembolism (VTE) rate 90% lower confidence limit is **at or below 0.67.**
Primary 1 or 2 Level Anterior Cervical Fusion Patient SSI Rate	Provider Survey Question #37	1 or 2 level primary anterior cervical fusion 30 day surgical site infection (SSI) rate 90% lower confidence limit is **at or below 0.87.**

Additional Selection Criteria for Hospitals without an 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**
Patient Written Selection Criteria	Provider Survey Question #8	Hospitals without an onsite ICU utilize **written patient selection criteria** for Spine Surgery 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 spine surgery patients.

Additional Selection Criteria for Hospitals without an ICU (Hospitals without an onsite ICU must meet all of the following Additional Selection Criteria, in addition to the Selection Criteria noted above.)		
Transfer Rate	Provider Survey Question #10	Hospitals without an onsite ICU 30-day, post-operative spine surgery 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 spine surgery patients.
Inpatient Transfer Facility Blue Distinction Center for spine surgery Designation(s)	Part 2: Facility Transfer Table	**All inpatient facility(ies)** with transfer agreement(s) to receive spine surgery patients from the hospitals without onsite ICU is/are currently **designated** as a Blue Distinction Centers for Spine Surgery for the 2019 designation cycle.

Informational Metrics for Hospitals with or without an 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 #16	Utilizes a patient-centered shared decision making process.
	Provider Survey Question #17	Staff who are responsible for shared decision making received training.
	Provider Survey Question #18	Systematically collects information in order to measure and improve decision making.
	Provider Survey Question #19	Facility uses a Shared Decision Making model or process addressing pain management that includes patient expectations and non-opioid treatment options in their spine surgery program.
Opioid Practices	Provider Survey Question #20	Actions the facility is taking to reduce opioid use for post-operative pain management in their spine surgery 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 #21	Percent of post-operative primary spine surgery patients opioid free upon discharge.
Functional Assessments	Provider Survey Question #38	Routinely uses a nationally recognized functional assessment tool to evaluated spine surgery patients.

Informational Metrics for Hospitals with or without an ICU (Informational Metrics are provided as feedback for awareness and quality improvement)		
Metric Name	**Source**	**Informational Quality Selection Criteria**
	Provider Survey Question #40	Routinely collect and report pre-operative and/or post-operative functional assessment patient outcomes for your spine surgery patients.

Table 4 – Quality Selection Criteria: Ambulatory Surgical Centers (ASCs)

Quality Selection Criteria for Ambulatory Surgical Centers (ASCs) (ASCs must meet ALL of the following 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.*
Total Facility Procedure Volume	Provider Survey Question #27	The total facility spine surgery procedure volume is **at least 60**.
A facility must have an analytic volume of **greater than or equal to 30 procedures** in **either** of the two clinical categories (lumbar fusion or cervical fusion). • A facility must meet the analytic volume for one of the two clinical categories then meet the thresholds for **ALL** four (4) clinical outcome metrics within that clinical category. • A facility who meets the analytic volume for both clinical categories must meet the thresholds for **ALL** eight (8) clinical outcome metrics within both clinical categories.		
Primary Lumbar Fusion for Spondylolisthesis Patient Volume for Outcome Analysis	Provider Survey Question #28	Analytic volume for outcomes is **at least 30** spondylolisthesis patients who had a 1 or 2 level primary lumbar fusion +/- decompression.

Quality Selection Criteria for Ambulatory Surgical Centers (ASCs) (ASCs must meet ALL of the following Selection Criteria to be eligible)		
Metric Name	**Source**	**Quality Selection Criteria**
Primary Lumbar Fusion for Spondylolisthesis Patient Reoperation Rate	Provider Survey Question #29	1 or 2 level primary lumbar fusion ± decompression for spondylolisthesis 90 day reoperation rate 90% lower confidence limit is **at or below 0.50.**
Primary Lumbar Fusion for Spondylolisthesis Patient Unplanned Readmission Rate	Provider Survey Question #30	1 or 2 level primary lumbar fusion ± decompression for spondylolisthesis 30 day unplanned readmission rate 90% lower confidence limit is **at or below 0.50.**
Primary Lumbar Fusion for Spondylolisthesis Patient VTE Rate	Provider Survey Question #31	1 or 2 level primary lumbar fusion + decompression for spondylolisthesis 30 day venous thromboembolism (VTE) rate 90% lower confidence limit is **at or below 0.50.**
Primary Lumbar Fusion for Spondylolisthesis Patient SSI Rate	Provider Survey Question #32	1 or 2 level primary lumbar fusion ± decompression for spondylolisthesis 30 day surgical site infection (SSI) rate 90% lower confidence limit is **at or below 0.50**.
Primary Anterior Cervical Fusion Patient Volume for Outcome Analysis	Provider Survey Question #33	Analytic volume for outcomes is **at least 30** patients who had a 1 or 2 level primary anterior cervical fusion.
Primary 1 or 2 Level Anterior Cervical Fusion Patient Reoperation Rate	Provider Survey Question #34	1 or 2 level primary anterior cervical fusion 90 day reoperation rate 90% lower confidence limit is **at or below 0.50**.
Primary 1 or 2 Level Anterior Cervical Fusion Patient Readmission Rate	Provider Survey Question #35	1 or 2 level primary anterior cervical fusion 30 day unplanned readmission 90% lower confidence limit is **at or below 0.50**.
Primary 1 or 2 Level Anterior Cervical Fusion Patient VTE Rate	Provider Survey Question #36	1 or 2 level primary anterior cervical fusion 30 day venous thromboembolism (VTE) rate 90% lower confidence limit is **at or below 0.50.**
Primary 1 or 2 Level Anterior Cervical Fusion Patient SSI Rate	Provider Survey Question #37	1 or 2 level primary anterior cervical fusion 30 day surgical site infection (SSI) rate 90% lower confidence limit is **at or below 0.50.**

Quality Selection Criteria for Ambulatory Surgical Centers (ASCs) (ASCs must meet ALL of the following Selection Criteria to be eligible)		
Metric Name	**Source**	**Quality Selection Criteria**
Written Patient Selection Criteria	Provider Survey Question #12	Ambulatory Surgery Centers utilize **written patient selection criteria** for spine surgery 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 #13	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 spine surgery patients.
Written Transfer Rate	Provider Survey Question #14	Ambulatory Surgery Centers 30-day, post-operative spine surgery patient transfer rates' **90% lower confidence limit (LCL) is less than or equal to 2.00**.
Inpatient Transfer Facility Blue Distinction Center for Spine Surgery Designation(s)	Part 2: Facility Transfer Table	**All inpatient facility(ies)** with transfer agreement(s) to receive spine surgery patients from the ambulatory surgery center is/are currently **designated** as a Blue Distinction Centers for Spine Surgery 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 #16	Utilizes a patient-centered shared decision making process.
	Provider Survey Question #17	Staff who are responsible for shared decision making received training.
	Provider Survey Question #18	Systematically collects information in order to measure and improve decision making.
	Provider Survey Question #19	Facility uses a Shared Decision Making model or process addressing pain management that includes patient expectations and non-opioid treatment options in their spine surgery program.
Opioid Practices	Provider Survey Question #20	Actions the facility is taking to reduce opioid use for post-operative pain management in their spine surgery 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

Informational Metrics for Ambulatory Surgery Centers (Informational Metrics are provided as feedback for awareness and quality improvement)		
Metric Name	**Source**	**Informational Quality Selection Criteria**
Opioid-Free Discharge Rate	Provider Survey Question #21	Percent of post-operative primary spine surgery patients opioid free upon discharge.
Functional Assessments	Provider Survey Question #38	Routinely uses a nationally recognized functional assessment tool to evaluated spine surgery patients.
	Provider Survey Question #40	Routinely collect and report pre-operative and/or post-operative functional assessment patient outcomes for your spine surgery 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 Spine Surgery 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 medical and surgical 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 spine surgery 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, 2015 thru December 31, 2017 and paid through March 31, 2018**.
- Spine Surgery episodes with commonly used and clinically comparable primary diagnoses and most typical MS-DRGs are included within each clinical category.
- Spine Surgery episodes were identified through a trigger procedure (or index event) for each clinical category by CPT, HCPCS, or ICD-10/ICD-9 procedure codes and were placed in one of four clinical categories:
- Adjusted allowed amounts for professional and in-network provider claims were included, using specific Spine Surgery clinical categories—Lumbar Fusion, Lumbar Laminectomy, Cervical Fusion, Cervical Laminectomy 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 Spine Surgery begins 30 days prior to the date of the admission for the index admission (look back period) and ends 90 days following discharge from the index admission (look forward period). 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 inpatient admission and subsequent outpatient stay (i.e., provider, physician, other professional, and ancillary costs).
  - The **90 day look forward (laminectomy/discectomy) and 180 day look forward (fusion)** 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., Lumbar Fusion, Lumbar Laminectomy, Cervical Fusion, and Cervical Laminectomy), 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.

- Severity levels were identified using the MS-DRG risk stratification system. Age band and gender were also used.
- For each spine procedure sub-category and relevant site of service case mix bands were created. Therefore, a case mix band was used for each of the four procedures for this program:
  - Lumbar Fusion
  - Lumbar Laminectomy
  - Cervical Fusion
  - Cervical Laminectomy
- Within each risk band, per-Episode costs were winsorized or capped at the 98th percentile for high costs and at the 2nd percentile for low costs of episodes for each applicable distribution.
- A Risk Ratio was calculated 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.
- Finally, 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 Spine Surgery episode was attributed to the provider where the procedure/surgery occurred, based on trigger events that occurred for that provider for each clinical category. Clinical Category Cost (CCC) was calculated separately for Lumbar Fusion, Lumbar Laminectomy, Cervical Fusion and Cervical Laminectomy, based on the median value of the adjusted total episode costs.

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

A provider must have five or more episodes in a Clinical Category to consider the Clinical Category Cost valid. All valid Clinical Category Costs are included in the final calculations. If the Clinical Category Cost is not valid, it will not be used in further calculations. In order to have a valid Composite Cost Index to be calculated, the following criteria apply:

- **A hospital** (with or without an onsite ICU) must have five or more matched episodes of cost data in at least **three out of the four** clinical categories: Lumbar Fusion, Lumbar Laminectomy, Cervical Fusion, and Cervical Laminectomy
- **An ambulatory surgery center** must have five or more matched episodes of cost data in at least **two out of the four** clinical categories: Lumbar Fusion, Lumbar Laminectomy, Cervical Fusion, and Cervical Laminectomy

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 7) requirements to be considered eligible for the Blue Distinction Centers+ (BDC+) designation.

Table 7 – Cost of Care Selection Criteria

Cost of Care Selection Criteria	
BDC+ Episode Volume for Hospital with/without onsite ICU	A hospital (with or without an ICU) must have **5 or more** matched episodes of cost data in **at least three out of the four** clinical categories: • Lumbar Fusion • Lumbar Laminectomy • Cervical Fusion • Cervical Laminectomy
BDC+ Episode Volume for Ambulatory Surgery Centers	An ambulatory surgery center must have **5 or more** matched episodes of cost data in **at least two out of the four** clinical categories: • Lumbar Fusion • Lumbar Laminectomy • Cervical Fusion • Cervical Laminectomy
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.