Blue Distinction®
Specialty Care

Selection Criteria and Program Documentation: Cardiac Care

Released October 2015
About This Document

This Selection Criteria and Program Documentation document outlines the Selection Criteria and evaluation process used to determine eligibility for the Blue Distinction® Centers for Cardiac Care program.

About the Blue Distinction Specialty Care Program

Blue Distinction Specialty Care is a national designation program recognizing healthcare facilities that demonstrate expertise in delivering quality specialty care—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 healthcare nationwide, and providing a credible foundation for local Blue Cross Blue Shield (BCBS) Plans to design benefits tailored to meet employers’ own quality and cost objectives. The Blue Distinction Specialty Care Program includes two levels of designation:

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

**Quality is key:** only those facilities that first meet nationally established, objective quality measures for Blue Distinction Centers will be considered for designation as a Blue Distinction Center+.

Facilities are evaluated on objective, transparent Selection Criteria with quality, business, and cost of care components. This Program focuses on cardiac valve surgery, coronary artery bypass graft (CABG), and percutaneous coronary interventions (PCI) episodes of care performed at acute care inpatient facilities. Facilities considered for this Program are defined as comprehensive, acute care, inpatient facilities. Early in 2015, local BCBS Plans invited facilities to be considered for the Blue Distinction Centers (BDC) or the Blue Distinction Centers+ (BDC+) designations. Of over 2,100 facilities invited across the country, over 800 facilities applied for the designation.

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

Selection Process

The selection process balances quality, cost, and access considerations to offer consumers meaningful differentiation in value for specialty care facilities 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 Blue Distinction Centers+ was used to address market and consumer demand for cost savings and affordable healthcare.

Access

- BCBS members’ access to Blue Distinction Centers was considered, as needed, to achieve the program’s overall goal of providing differentiated performance on quality and, for the BDC+ designation, cost of care.
Evaluation Components: Data Sources

Objective data from a detailed Provider Survey, publicly available quality data, BCBS Plan healthcare claims data, and Plan Survey information were used to evaluate and identify facilities that meet the Program’s Selection Criteria. A facility must meet the Program’s specific Selection Criteria, defined by the following evaluation components (Table 1), to be eligible for the BDC or BDC+ designation:

Table 1 – Evaluation Components

<table>
<thead>
<tr>
<th>EVALUATION COMPONENT</th>
<th>DATA SOURCE</th>
<th>BLUE DISTINCTION CENTERS (BDC)</th>
<th>BLUE DISTINCTION CENTERS+ (BDC+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>1. Information obtained from facility in the Provider Survey.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>2. Publicly available data from Hospital Compare’s December 2014 release.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.hospitalcompare.hhs.gov">www.hospitalcompare.hhs.gov</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>1. Information obtained from the local BCBS Plan, for facilities within its Service Area, on:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Facility’s and Physician Specialists’ participation status in the local BCBS Plan’s BlueCard PPO Network.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>• Local BCBS Plan Criteria, if applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Information obtained by BCBSA on whether the facility meets BCBSA criteria for avoiding conflicts with BCBSA logos and trademarks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Care</td>
<td>BCBS Plan healthcare claims data.</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Measurement Framework

The Blue Distinction Centers for Cardiac Care program established a nationally consistent approach to evaluating quality and safety by incorporating quality measures with meaningful impact, with criteria that will evolve over time through future evaluation cycles, consistent with medical advances and measurement in this specialty area. Measurement framework for this and other Blue Distinction value-based initiatives were developed using the following guiding principles:

1. Utilize a credible process and produce credible results with meaningful differentiated outcomes.
2. Align with other national efforts using established measures, where appropriate and feasible.
3. Simplify and streamline measures and reporting processes.
4. Enhance transparency and ease of explaining program methods.
5. Utilize existing resources effectively to minimize costs and redundancies.
6. Meet existing and future demands from BCBS Plans, national accounts, and BCBS members.

Quality Selection Criteria

Facilities 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 from objective, publicly available sources.

The quality evaluation for facilities was based on objective, publicly available quality metrics obtained from Hospital Compare and facility responses to the Provider Survey. The quality Selection Criteria includes general facility structure metrics and cardiac specific process and outcome metrics.

General facility metrics were obtained from the Provider Survey. Cardiac specific metrics were obtained from the Provider Survey (with measure results from the facility’s National Cardiovascular Disease Registry® [NCDR] CathPCI Registry® 2014 Q2 Report, and the Society of Thoracic Surgeons [STS] Harvest 3 Report for cardiac bypass and valve surgeries), as well as publicly available national data from the Hospital Compare database (December 2014 release).

Facility results for percutaneous coronary intervention metrics were analyzed using a confidence interval (90 percent) around the point estimate from either the reported:

- numerator and denominator events or
- denominator events and rates.
“Confidence Interval” is a term used in statistics that measures the probability that a result will fall between two set values. Evaluation of the Confidence Interval (CI) depends on whether lower results or higher results represent better performance (e.g., lower mortality is better, but higher adherence to medication is better). Tables 2a and 2b below translate CI results into “meets criteria” or “does not meet criteria” categories. Additionally, interpretation into three statistical categories of performance is provided for comparison (“statistically better,” “no different,” or “statistically worse” than the threshold).

Table 2a – Confidence Interval Results for PCI Measures: Lower Results are Better

<table>
<thead>
<tr>
<th>PCI MEASURES WHERE LOWER RESULTS ARE BETTER</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITY EVALUATION RESULT</td>
<td>FACILITY’S LOWER CONFIDENCE LIMIT (LCL)</td>
<td>FACILITY’S PERFORMANCE CATEGORY</td>
</tr>
<tr>
<td>MEETS CRITERIA</td>
<td>LCL is Below or Equal to the Threshold</td>
<td>Statistically Better or No Different than the Threshold</td>
</tr>
<tr>
<td></td>
<td>LCL is Above the Threshold</td>
<td>Statistically Worse than the Threshold</td>
</tr>
</tbody>
</table>

Table 2b – Confidence Interval Results for PCI Measures: Higher Results are Better

<table>
<thead>
<tr>
<th>PCI MEASURES WHERE HIGHER RESULTS ARE BETTER</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITY EVALUATION RESULT</td>
<td>FACILITY’S UPPER CONFIDENCE LIMIT (UCL)</td>
<td>FACILITY’S PERFORMANCE CATEGORY</td>
</tr>
<tr>
<td>MEETS CRITERIA</td>
<td>UCL is Above or Equal to the Threshold</td>
<td>Statistically Better or No Different than the Threshold</td>
</tr>
<tr>
<td>DOES NOT MEET CRITERIA</td>
<td>UCL is Below the Threshold</td>
<td>Statistically Worse than the Threshold</td>
</tr>
</tbody>
</table>

Other metrics, where a CI was not calculated, were compared against the Selection Criteria threshold. Specific details on the Cardiac Care quality Selection Criteria are outlined below in Table 3.

Facilities were evaluated for quality in the following domains for the Blue Distinction Centers for Cardiac Care program. A facility must meet all requirements in Table 3 to meet the Quality evaluation of the overall designation decision.
Blue Distinction Centers for Cardiac Care | Selection Criteria and Program Documentation

### Table 3 – Quality Selection Criteria

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>SOURCE</th>
<th>QUALITY SELECTION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Accreditation*</td>
<td>Provider Survey</td>
<td>The facility is fully accredited by <strong>at least one</strong> of the following national accreditation organizations*:</td>
</tr>
<tr>
<td></td>
<td>Q#3</td>
<td>• The Joint Commission (TJC) (without provision or condition) in the Hospital Accreditation Program.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Healthcare Facilities Accreditation Program (HFAP) of the American Osteopathic Information Association (AOIA) as an acute care hospital.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• National Integrated Accreditation Program (NIAHOSM)—Acute Care of DNV GL Healthcare.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Center for Improvement in Healthcare Quality (CIHQ) in the Hospital Accreditation Program.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>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 BCBS Plan Criteria; for details, contact the facility’s local BCBS Plan.</em></td>
</tr>
<tr>
<td>Comprehensive Facility</td>
<td>Provider Survey</td>
<td>The facility is a comprehensive acute care facility that offers <strong>all</strong> of the following services on site:</td>
</tr>
<tr>
<td></td>
<td>Q#4</td>
<td>• Intensive care unit;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Emergency Room or Emergency Services that include plans or systems for onsite emergency admission of post-operative patients with 24/7 availability of onsite medical response teams;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 24/7 availability of in-house emergency physician coverage;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Diagnostic radiology, including MRI and CT;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 24/7 availability of inpatient pharmacy services (may include alternative night-time access when pharmacy is closed);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Blood bank or 24/7 access to blood bank services; <strong>AND</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 24/7 availability of Clinical Laboratory Improvement Amendments (CLIA) accredited laboratory services.</td>
</tr>
</tbody>
</table>
ALL SELECTION CRITERIA MUST BE MET FOR ELIGIBILITY CONSIDERATION

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>SOURCE</th>
<th>QUALITY SELECTION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCDR CathPCI Registry® Participation &amp; Report</td>
<td>Provider Survey Q#5, 6</td>
<td>Facility reports to the National Cardiovascular Data Registry® (NCDR) CathPCI Registry® and has reported through June 30, 2014. Facility has the CathPCI Registry® 2014 Q2 Institutional Outcomes Report (including 4 consecutive quarters of data, which have passed all CathPCI Registry® data</td>
</tr>
<tr>
<td>Percutaneous Coronary Intervention (PCI) Volume for Outcome Reliability</td>
<td>Provider Survey Q#6a</td>
<td>PCI Minimum Sample Size: The facility reports a minimum sample size of 100 or greater.</td>
</tr>
</tbody>
</table>
### Quality Selection Criteria

#### Cardiac Care Selection Criteria

- **STS Overall Composite Star Ratings**: Facility’s calculated **Lower Confidence Limit (LCL)** for the following NCDR CathPCI Executive Summary Measures:
  - Executive Summary Measure #1: PCI In-Hospital Risk Adjusted Mortality (All Patients) 90% Lower Confidence Limit is **at or below 1.70**.
  - Executive Summary Measure #37: PCI In-Hospital Risk Adjusted Rate of Bleeding Events 90% Lower Confidence Limit is **at or below 5.4**.
  - Executive Summary Measure #30: Proportion of PCI Procedures Not Classifiable for Appropriate Use Criteria (AUC) Reporting 90% Lower Confidence Limit is **at or below 11.60**.
  - Executive Summary Measure #36: Patients WITHOUT Acute Coronary Syndrome: Proportion of Evaluated PCI Procedures that were Inappropriate 90% Lower Confidence Limit is **at or below 36.50**.

- Facility’s calculated **Upper Confidence Limit (UCL)** for the following NCDR CathPCI Executive Summary Measures:
  - Executive Summary Measure #4: Proportion of STEMI Patients Receiving Immediate PCI w/in 90 Minutes 90% Upper Confidence Limit is **at or above 90.00**.
  - Executive Summary Measure #38: Composite Discharge Medications in Eligible PCI Patients 90% Upper Confidence Limit is **at or above 88.4**.

- Provider Survey Q#10c, 14c
- Provider Survey Q#11b, 15b
- Provider Survey Q#12b, 16b

#### STS Overall Composite Star Ratings*

- Facility’s Overall STS Isolated CABG Composite Star Rating is **at least 2 Stars**.
  - **NOTE**: Facilities with more than 1 STS Participant must meet this Cardiac Care Selection Criteria for **each participant**.

- Facility’s Overall STS Isolated Aortic Valve Replacement (AVR) Composite Star Rating is **at least 2 Stars**.
  - **NOTE**: Facilities with more than 1 STS Participant must meet this Cardiac Care Selection Criteria for **each participant**.

- Facility’s Overall STS CABG + AVR Combined Composite Star Rating is **at least 2 Stars**.
  - **NOTE**: Facilities with more than 1 STS Participant must meet this Cardiac Care Selection Criteria for **each participant**.

#### Hospital Compare Measures

- **Acute Myocardial Infarction (AMI) 30 day risk adjusted mortality rate is reported as “better than or no different than the national rate.”**
- **AMI 30 day risk adjusted readmission rate is reported as “better than or no different than the national rate.”**
Business Selection Criteria

The Business Selection Criteria (Table 4) consists of four components: Facility Participation; Physician Specialists Participation; Blue Brands Criteria; and Local BCBS Plan Criteria (if applicable). A facility must meet all requirements to be considered eligible for the Blue Distinction Centers for Cardiac Care designation.

Table 4 – Business Selection Criteria

<table>
<thead>
<tr>
<th>BUSINESS SELECTION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Participation</td>
</tr>
<tr>
<td>Blue Brands Criteria</td>
</tr>
<tr>
<td>Local BCBS Plan Criteria</td>
</tr>
</tbody>
</table>

2 De Minimis Rule may be applied, 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 were used to provide a consistent and objective approach to identify Blue Distinction Centers+.

**Quality is key:** only those facilities that first meet nationally established, objective quality measures for Blue Distinction Centers will be considered for designation as a Blue Distinction Center+.

Cost Data Sources and Defining the Episodes

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

- Claims were evaluated using adjusted allowed amounts derived from BCBS Plan claims data from July 1, 2010 through June 30, 2014, and paid through August 31, 2014 for Cardiac Care trigger procedures (defined below) occurring between April 1, 2011 and March 31, 2014.

- Cardiac Care episodes were identified through a trigger procedure (or index event) for each clinical category by CPT, HCPCS, or ICD9 codes and were placed in one of three clinical categories:
  - Cardiac Valve Surgery
  - Coronary Artery Bypass Graft (CABG)
  - Percutaneous Coronary Intervention (PCI)

- A hierarchy was used to place episodes that include multiple trigger procedures into a single clinical category for analysis (i.e., Cardiac Valve Surgery > CABG > PCI).

- Episodes with commonly used and clinically comparable primary diagnoses and most typical MS-DRGs are included within each clinical category. (Approximately 2% of episodes were excluded as atypical MS-DRGs.)

- Adjusted allowed amounts for professional and in-network facility claims were included, using specific Cardiac Care clinical categories—Cardiac Valve Surgery, CABG, or PCI for actively enrolled commercial BCBS members. Members under 25 and over 64 years were excluded from the cost analysis.

- Medicare/Medicaid and secondary claims were excluded.

- The episode window for Cardiac Care 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 facility, 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., facility, 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).

Cost methodology took the sum of all costs incurred during the episode (including facility, physician, other professional, and ancillary costs) for each individual member, including the specified days before and after the trigger for the Cardiac Care episode.

For facilities located in overlapping areas served by more than one local BCBS Plan, the same method for cost evaluation was used but the claims data and results were evaluated separately for each of those local BCBS Plans.

**Adjusting Episode Costs**

Facility episode costs were analyzed and adjusted separately for each clinical category (i.e., Cardiac Valve Surgery, CABG, and PCI), as follows:

A geographic adjustment factor was applied to the episode cost, to **account for geographic cost variations in delivering care**. Episode costs were adjusted using the 2012 CMS Geographic Adjustment Factors (GAF), resulting in a Geographically Adjusted Facility Episode Cost.

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:

- Identified patient severity levels, using the MS-DRG risk stratification system.
- Created separate risk bands within episodes, based on patient severity level, case mix, and gender. Only one age band, 25-64 years, was used for all patients. Case mix category distinctions were made for both the CABG clinical category and the PCI clinical category, separating when the trigger procedure was associated with an acute myocardial infarction (AMI) versus when the trigger procedure was not associated with AMI. Outpatient cases for PCI without AMI were also included as a separate case mix category. Cardiac valve procedures were divided into 3 case mix categories: Aortic Valve Replacement, Mitral Valve Repair, and Mitral Valve Replacement.
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 facility’s geographically adjusted 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 the Cost Measure

Each Cardiac Care episode was attributed to the facility where the procedure/surgery occurred, based on trigger events that occurred at that facility for each clinical category. Clinical Category Facility Cost (CCFC) was calculated separately for Cardiac Valve Surgery, CABG, and PCI, based on the median value of the adjusted episode costs. Confidence intervals (90 percent) were calculated around each Clinical Category Facility Cost measure; the Upper Confidence Limit of the measure was divided by the National median episode cost to become the Clinical Category Facility Cost Index (CCFCI).

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 Facility 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. The Composite Facility Cost Index was then rounded down to the nearest 0.025 for each facility and compared to the National Cost Selection Criteria.

A facility must have 5 or more episodes in at least 2 of the 3 Cardiac Care clinical categories for a valid Composite Facility Cost Index to be calculated. Any facility that did not meet this episode minimum did not meet the cost of care Selection Criteria. If the Clinical Category Facility Cost is not valid, it cannot be used in the Composite Facility Cost Index calculation. If a facility met the episode minimum for only 2 of the 3 clinical categories, then the other clinical category, for which the episode minimum was not met, was not included in the formula numerator and denominator. For example, if a facility had at least 5 episodes for CABG and 5 episodes for PCI, then it would have a two-part formula, as Cardiac Valve Surgery would not be included in the Composite Facility Cost Index calculation.
Cost Selection Criteria

In addition to meeting the nationally established, objective quality and business measures for Blue Distinction Centers, a facility also must meet all of the following cost of care Selection Criteria (Table 5) requirements to be considered eligible for the Blue Distinction Centers+ (BDC+) designation for Cardiac Care.

Table 5 – Cost of Care Selection Criteria

<table>
<thead>
<tr>
<th>COST OF CARE SELECTION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility must have a <strong>minimum of 5 episodes</strong> of cost data for <strong>at least 2 clinical categories</strong>.</td>
</tr>
<tr>
<td><strong>Composite Facility Cost Index</strong> must be <strong>below 1.400</strong>.</td>
</tr>
</tbody>
</table>

Questions

Contact your local BCBS Plan for 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 healthcare. 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 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.