

# CIGNA CENTERS OF EXCELLENCE 2019 METHODOLOGY

For hospitals  
October 2018

Together, all the way.™

---



## Table of contents

Introduction.....	3
The 18 surgical procedures and conditions evaluated for 2019 .....	3
Patient outcomes data sources.....	4
Cigna Hospital Quality Index criteria .....	4
Hospital-wide readmission index.....	4
Readmission rate index for pneumonia.....	5
HAI index.....	5
Early elective delivery index.....	5
Complications index .....	6
Mortality index .....	7
Primary cesarean-section delivery rate index .....	9
HCAHPS summary star rating index.....	9
Leapfrog Hospital Safety Score index.....	10
Patient outcomes: Cigna Hospital Quality Index calculation and scoring .....	10
Cigna bariatric surgery designations.....	11
Hospital cost-efficiency score calculation.....	11
Hospital cost-efficiency score ranking.....	13
Market-level hospital comparisons.....	13
No results shown .....	13
Process to provide feedback .....	14
American Hospital Association #123 for Equity Pledge Campaign (informational only).....	14
APPENDIX .....	15
Appendix 1: Data sources for COE .....	15
Appendix 2: Condition and procedure population specifications .....	16
Appendix 3: Conditions and procedures with Cigna Hospital Quality Index component index weights .....	26

## Introduction

We annually evaluate hospital patient outcomes and cost-efficiency information through the Cigna Centers of Excellence (COE) program. The 2019 Cigna COE hospital profiles will be available in the online provider directories located on Cigna.com and myCigna.com beginning January 1, 2019.

COE hospital profiles are available for most Cigna-participating hospitals. They contain information for up to 18 inpatient surgical procedures and medical conditions, with 14 of them contributing to seven categories that combine related procedures.

**Scoring.** For each surgical procedure and medical condition we evaluate, hospitals can receive a score of up to three stars (\*) for patient outcomes and up to three stars for cost-efficiency measures. Hospitals that attain at least five stars total – three stars for patient outcomes plus two stars for cost efficiency OR three stars for cost efficiency plus two stars for patient outcomes – receive the Cigna COE designation for that procedure or condition.

**Individual versus category-level assessments.** We evaluate four surgical procedures individually, and 14 medical conditions by category. (See Tables 1A and 1B.) Note that we award COE status for the condition categories (back surgery, cancer conditions, cardiac catheterization and angioplasty, delivery, heart surgery, joint replacement, and pulmonology medical), and not for the individual medical conditions or surgical procedures that comprise the categories.

**Hospitals evaluated for 2019.** For the 2019 COE profiles, approximately 80 percent of Cigna network-participating hospitals (3,758 of 4,756), including those in third-party vendor networks, met the defined volume criteria for evaluation of at least one surgical procedure or medical condition.

**The COE program should not be the sole basis for decision-making.** This is because it reflects only a partial assessment of quality and cost efficiency for select hospitals. We encourage Cigna customers to consider all relevant factors, and speak with their treating physician when selecting a hospital. Additionally, we do not use assessments under this program as the sole basis for performance-based payments to Cigna-contracted hospitals. However, assessments may be a component of an overall pay-for-performance-based payment methodology for some contracted hospitals.

## The 18 surgical procedures and conditions evaluated for 2019

Table 1A shows the four surgical procedures we assessed **individually**, and Table 1B shows the 14 medical conditions we assessed **by category** for the 2019 hospital profiles. We determined the procedures and medical condition categories by volume, variability of outcome, and consumer interest.

**Table 1A**

2019 individual level assessment: Four surgical procedures	
<ul style="list-style-type: none"> <li>Bariatric surgery<sup>1</sup></li> <li>Colon surgery</li> </ul>	<ul style="list-style-type: none"> <li>Gallbladder removal (laparoscopic)</li> <li>Hysterectomy</li> </ul>

**Table 1B**

2019 category level assessments: 14 medical conditions			
Back surgery	Cancer conditions	Cardiac catheterization and angioplasty	Delivery
<ul style="list-style-type: none"> <li>Disc surgery</li> <li>Spinal fusion</li> </ul>	<ul style="list-style-type: none"> <li>Mastectomy</li> <li>Prostatectomy (radical)</li> </ul>	<ul style="list-style-type: none"> <li>Cardiac catheterization</li> <li>Angioplasty, with or without stent</li> </ul>	<ul style="list-style-type: none"> <li>Cesarean section<sup>1</sup></li> <li>Vaginal delivery<sup>1</sup></li> </ul>
Heart surgery	Joint replacement	Pulmonology medical	
<ul style="list-style-type: none"> <li>Coronary artery bypass graft (CABG)</li> <li>Heart valve replacement</li> </ul>	<ul style="list-style-type: none"> <li>Hip</li> <li>Knee</li> </ul>	<ul style="list-style-type: none"> <li>Chronic obstructive pulmonary disorder (COPD)</li> <li>Pneumonia</li> </ul>	

<sup>1</sup> To increase the volume of data for evaluation for states where MedPAR data is the only source, we supplemented surgical procedures and medical conditions with Cigna claims data.

## Patient outcomes data sources

For 2019, we assessed the quality of care treatment provided for the 18 surgical procedures and medical conditions shown in Tables 1A and 1B using measures of patient outcomes derived from publicly available, hospital self-reported All-Payer and MedPAR data. (We used MedPAR data when All-Payer data was not available.) We used two years of hospital data in the analysis. (See Appendix 1 for state-specific data sources.)

To help ensure hospital data is stable, and mitigate the variation in a hospital's rankings from year-to-year, we established a "stable volume threshold," which requires that:

- Hospital admission volume for each surgical procedure or medical condition meets a minimum of 100 incidences for evaluation during the measurement period.
- Bariatric surgery meets a minimum of 50 admissions.
- Hospital admission volume for category-level evaluation meets a minimum of 50 admissions for each condition within the category during the measurement period.

## Cigna Hospital Quality Index criteria

This is a composite index that we use to rank hospital performance for quality for each of the COE-eligible medical conditions and surgical procedures. The index comprises nine component indices we develop, which each measure a dimension of hospital quality performance.

We develop the nine component indices based on the nine nationally recognized measures listed below.

- (1) Centers for Medicare & Medicaid Services (CMS) hospital-wide readmission rate
- (2) CMS readmission rate for pneumonia
- (3) CMS healthcare-associated infections (HAI) measure
- (4) CMS early elective delivery measure
- (5) Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicator (PSI) specifications complications rate
- (6) AHRQ Inpatient Quality Indicators (IQI) mortality rate
- (7) AHRQ IQI primary cesarean-section delivery rate
- (8) Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Star Rating
- (9) Leapfrog Hospital Safety Score

Once we use these nine measures to create our nine component indices, we use between three and six of these indices to determine the overall Cigna Hospital Quality Index score for each specific condition or procedure we are assessing. (See Appendix 3.) The nine component indices for the Cigna Hospital Quality Index are described next in greater detail.

## Hospital-wide readmission index

We construct this index using the CMS hospital-wide readmission measures from the CMS Hospital Compare data. It tracks the hospital-wide rate of readmission after a patient's discharge from the hospital. We use it as a component in the construction of the overall Cigna Hospital Quality Index for evaluating hospital performance.

We construct the raw index by dividing the CMS hospital-wide readmission score for each hospital by the national average hospital-wide readmission score. (*Note: We evaluate teaching and non-teaching hospitals separately.*) We then trim the index so that any index value greater than 1.5 is assigned a value of 1.5 and any index value less than 0.5 is assigned a value of 0.5. This helps prevent skewing of the overall Cigna Hospital

Quality Index. If the CMS hospital-wide readmission index is less than 1.0, then the hospital is performing at a higher quality level than its peer group (teaching or non-teaching hospitals). A score of 1.0 represents average performance, and a score of greater than 1.0 represents a lower level of quality performance.

### **Readmission rate index for pneumonia**

We construct this index using the CMS Hospital Compare readmission rate data for the pneumonia medical condition. We use it as a component in the construction of the overall Cigna Hospital Quality Index for evaluating hospital performance for that condition.

To generate our readmission rate index for pneumonia for the hospital, we divide the CMS readmission rate for pneumonia for the hospital by the national average hospital-readmission rate for pneumonia. (*Note: We analyze teaching hospitals and non-teaching hospitals separately.*) If the readmission rate index for pneumonia is less than 1.0, then the hospital is performing at a higher quality level than its peer group (teaching or non-teaching hospitals). A score of 1.0 represents average performance, and a score of greater than 1.0 represents a lower level of quality performance.

We only use the readmission rate index for pneumonia in the pulmonology medical condition category, as a reasonable approximation. A CMS readmission rate for COPD is not available.

### **HAI index**

We construct this index using the six CMS HAI measures from the CMS Hospital Compare database. It shows how often patients in a particular hospital contract certain infections during the course of their medical treatment when compared to like hospitals.

We use the HAI measures listed below to calculate the index.

- Central line-associated blood stream infections (CLABSI)
- Catheter-associated urinary tract infections (CAUTI)
- Methicillin-resistant staphylococcus aureus (MRSA) blood laboratory-identified events (bloodstream infections)
- Clostridium difficile (C.diff.) laboratory-identified events (intestinal infections)
- Surgical site infection from colon surgery (SSI: Colon)
- Surgical site infection from abdominal hysterectomy (SSI: Hysterectomy)

We divide the sum of the numerators (observed count) by the sum of the denominators (predicted count) for all of the measures. This produces an overall score, which we then divide by the national average CMS hospital HAI score to produce the index. (*Note: We evaluate teaching and non-teaching hospitals separately.*) We then trim the index so that any index value greater than 1.5 is assigned a value of 1.5 and any index value less than 0.5 is assigned a value of 0.5. This helps prevent skewing of the overall Cigna Hospital Quality Index.

### **Early elective delivery index**

We construct this index using the Process of Care measure (PC-01) from the CMS Hospital Compare database. It shows the percentage of newborns whose deliveries were scheduled too early (one to three weeks early), when a scheduled delivery was not medically necessary.

We convert the raw early elective delivery score from the Hospital Compare database to a normalized scale using Box-Cox transformation. (This transformation enables us to trim the index values at 1.5 and 0.5, respectively.) We then divide the normalized score by the national average early elective delivery score for vaginal delivery, cesarean section, and deliveries, to produce the index. (*Note: We evaluate teaching and non-teaching hospitals separately.*) We then trim the index so that any index value greater than 1.5 is assigned a

value of 1.5 and any index value less than 0.5 is assigned a value of 0.5. This helps prevent skewing of the overall Cigna Hospital Quality Index.

We will only use this index in the quality evaluation for the delivery condition category that includes vaginal delivery and cesarean section.

## Complications index

We use this index to help assess if a hospital has a pattern of complications for patients who had one of the COE program’s assessed surgical procedures or medical conditions. We construct it using the AHRQ PSI specifications. The index contributes to the Cigna Hospital Quality Index for a given hospital for a surgical procedure or medical condition, along with other quality indices, with each index receiving a designated weight.

We follow the steps listed below to construct the complications index.

1. Identify each patient during the data period who underwent an assessed COE program surgical procedure or received treatment for an assessed COE program medical condition at Hospital A. Identify the patient population using the specific Medicare Severity-Diagnosis Related Group (MS-DRG) and International Classification of Diseases, 10th Revision (ICD-10) procedure code logic that was developed by WebMD®. (See Appendix 2.)
2. For each procedure or condition-specific population of patients, determine if each patient in that population was at risk for one or more of the 18 medical or surgical complications as defined by the AHRQ PSIs. If at risk, determine if the patient experienced that complication. Determine at-risk status for the complication using the relevant PSI denominator specifications, and determine if the complication occurred using the relevant PSI numerator specifications. (See Table 2 below to view the specific complications we evaluate.)

**Table 2: AHRQ PSIs used to calculate the complications index**

PSI	Name	Category	Type
PSI 3	Pressure decubitus ulcer	PSI	Complications
PSI 6	Iatrogenic pneumothorax	PSI	Complications
PSI 7	Central venous catheter-related blood stream infection	PSI	Complications
PSI 8	Post-operative hip fracture	PSI	Complications
PSI 9	Postoperative hemorrhage/hematoma	PSI	Complications
PSI 10	Postoperative physiologic and metabolic derangements	PSI	Complications
PSI 11	Postoperative respiratory failure	PSI	Complications
PSI 12	Perioperative pulmonary embolism or deep vein thrombosis	PSI	Complications
PSI 13	Postoperative sepsis	PSI	Complications
PSI 14	Postoperative wound dehiscence	PSI	Complications
PSI 15	Accidental puncture or laceration rate	PSI	Complications
Cigna	Having one or more PSIs (3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15)	WebMD-created composite of ARHQ & WebMD QI	Cigna complications
PSI 17	Birth trauma – injury to neonate	PSI	OB
PSI 18	Obstetric trauma rate – vaginal delivery with instrument	PSI	OB
PSI 19	Obstetric trauma rate – vaginal delivery without instrument	PSI	OB
Cigna	Having one or more PSIs (17, 18, 19)	WebMD-created composite of ARHQ QI	Cigna OB complications

You can find detailed specifications for all AHRQ PSIs on the AHRQ website at [QualityIndicators.AHRQ.gov/modules/PSI\\_overview.aspx](http://QualityIndicators.AHRQ.gov/modules/PSI_overview.aspx).

3. If the patient was at risk for one or more specific complications as defined by the above PSIs, assign a value of 1. If the patient was not at risk for one or more specific complications as defined by the above PSIs, assign a value of 0. The resulting number (1 or 0) accumulates in the denominator. Repeat this process for all patients in the identified population.
4. If the patient was at risk, and experienced one or more complications as defined by the above PSIs, assign a value of 1. If the patient did not experience one or more complications as defined by the above PSIs, assign a value of 0. The resulting number (1 or 0) accumulates in the numerator. Repeat this process for all patients in the identified population.
5. The result of this process will be a fraction between 0.0 and 1.0 that reflects an overall complication rate. This is the percentage of patients who were at risk for medical and surgical complications, and experienced one or more complications as a result of the surgical procedure or treatment for the specified medical condition.

**Note:** We do not use the individual AHRQ PSIs to calculate complication-specific rates for a hospital. Rather, we use the PSI technical specifications for the numerator (complication occurrence) and denominator (at risk for complication) to arrive at an overall aggregate complication rate for the surgical procedure or medical condition being assessed.

6. We APR-DRG<sup>2</sup> case mix and severity adjust all complication rates, respective to teaching or non-teaching facility status.
7. We calculate a modified (volume-weighted) z score to determine if there is a significant statistical difference between each hospital's actual complication rate, and the expected (average) complication rate for the surgical procedure or medical condition. *(Note: We analyze teaching hospitals and non-teaching hospitals separately.)*
8. We evaluate the difference in the actual complication rate to the expected complication rate for each hospital for statistical significance at both a 90 percent and an 80 percent confidence level.

If a hospital's complication rate is:	Then the hospital is assigned a complications index value of:
Significantly <b>lower</b> than the expected complication rate with a <b>90</b> percent confidence level	0.50
Significantly <b>lower</b> than the expected complication rate with an <b>80</b> percent confidence level	0.75
<b>Not significantly different</b> than the expected complication rate with an <b>80</b> percent confidence level	1.00
Significantly <b>higher</b> than the expected complication rate with an <b>80</b> percent confidence level	1.25
Significantly <b>higher</b> than the expected complication rate with a <b>90</b> percent confidence level	1.50

We use the value for each hospital (i.e., the complications Index) as one component of the overall Cigna Hospital Quality Index to which we apply a weight using the quality index-weighting grid. (See Appendix 3.)

<sup>2</sup> All Patients Refined-Diagnosis Related Group

## Mortality index

We utilize the ARHQ software to construct a mortality index based on the AHRQ IQI for each hospital we evaluate for COE status for the following:

- Heart surgery
- Heart valve replacement
- Pneumonia
- Pulmonology medical category (COPD and adult pneumonia)

**Table 3: The specific AHRQ IQIs for mortality**

IQI	Name	Category	Type
IQI 8	Mortality esophageal resection	IQI	Mortality
IQI 9	Mortality pancreatic resection	IQI	Mortality
IQI 11	Mortality abdominal aortic aneurysm (AAA)	IQI	Mortality
IQI 12	Mortality CABG (ICD-10)	IQI	Mortality
IQI 13	Mortality craniotomy	IQI	Mortality
IQI 14	Mortality hip replacement	IQI	Mortality
IQI 15	Mortality acute myocardial infarction (AMI)	IQI	Mortality
IQI 16	Mortality congestive heart failure (CHF)	IQI	Mortality
IQI 17	Mortality acute stroke	IQI	Mortality
IQI 18	Mortality gastrointestinal (GI) hemorrhage	IQI	Mortality
IQI 19	Mortality hip fracture	IQI	Mortality
IQI 20	Mortality pneumonia	IQI	Mortality
IQI 30	Mortality percutaneous transluminal coronary angioplasty (PTCA)	IQI	Mortality
IQI 31	Mortality carotid endarterectomy	IQI	Mortality
IQI 32	Mortality acute myocardial infarction (AMI) without transfer cases	IQI	Mortality
NQI <sup>3</sup> 2	Neonatal mortality rate	PQI <sup>4</sup>	Mortality
PSI 2	Death low-mortality DRG	PSI	Mortality
PSI 4	Mortality, treatable complications	PSI	Mortality
Cigna	Having one or more IQI (8, 9, 11, 12, 13, 14, 15,16, 17, 18, 19, 20, 30, 31, 32), NQI 2, PSI 2, PSI 4	WebMD created composite of ARHQ QI	Cigna mortality

<sup>3</sup> Neonatal Quality Indicator

<sup>4</sup> Pediatric Quality Indicators

We follow the steps listed below to construct the mortality index.

1. Identify each patient during the data period who underwent an assessed COE program surgical procedure or received treatment for an assessed COE program medical condition at each hospital we evaluate. Identify the patient population using the specific MS-DRG and ICD-10 procedure code logic that was developed by WebMD. (See Appendix 2.)
2. For each patient, determine if he or she was at risk of death, and died as a result of the procedure or condition being assessed. The AHRQ software analyzes the ICD-10 and Current Procedural Terminology (CPT<sup>®</sup>) data for each patient, as well as the discharge disposition in the hospital's patient population for each relevant IQI.
3. Create a composite indicator for each patient. If the patient was at risk of death for one or more of the AHRQ IQIs, assign a value of 1 in the denominator of the composite indicator. Otherwise, assign a value of 0. If the patient was determined to be at risk of death for one or more of the AHRQ IQIs, and died, assign a value of 1 in the numerator for the composite indicator. Otherwise, assign a value of 0.
4. For all of the patients in the patient population who were hospitalized for the procedure or condition being assessed:
  - Add the numerators of the composite indicator, which represents the number of patients who died.



- Add the denominators of the composite indicator, which represent the number of patients who were at risk for death.
5. Divide the numerator by the denominator to produce the raw mortality rate. Then, APR-DRG case mix and severity adjust it, respective to teaching or non-teaching facility status, to produce the adjusted mortality rate.
  6. Calculate a modified (volume-weighted) z-score to determine whether or not there is a significant statistical difference between each hospital's actual mortality rate (risk adjusted) and the expected (average) mortality rate (risk adjusted) for the surgical procedure or medical condition. *(Note: We analyze teaching hospitals and non-teaching hospitals separately.)*
  7. Evaluate the difference in the actual to expected mortality rate for each hospital for statistical significance at both a 90 percent and 80 percent confidence level.

If a hospital's mortality rate is:	Then the hospital is assigned a mortality index value of:
Significantly <b>lower</b> than the expected mortality rate with a <b>90</b> percent confidence level	0.50
Significantly <b>lower</b> than the expected mortality rate with an <b>80</b> percent confidence level	0.75
<b>Not significantly different</b> than the expected mortality rate with an <b>80</b> percent confidence level	1.00
Significantly <b>higher</b> than the expected mortality rate with an <b>80</b> percent confidence level	1.25
Significantly <b>higher</b> than the expected mortality rate with a <b>90</b> percent confidence level	1.50

8. Use the mortality index value for each hospital as one component of the overall Cigna Hospital Quality Index. Apply a weight to it using the quality index-weighting grid. (See Appendix 3.)

### Primary cesarean-section delivery rate index

We construct this index using the AHRQ IQI #33. It shows the percentage of all deliveries that are cesarean-section deliveries. We use the index to evaluate each assessed hospital's quality performance related to vaginal deliveries. It excludes deliveries with a diagnosis of abnormal presentation, preterm, fetal death, multiple gestation, or previous cesarean delivery from the denominator of the measure, as are cases in which any breech procedure code is present.

We construct the index using a process that is similar to the one we use to construct the complications index, as well as other AHRQ PSI measures. The index receives a weight of 0.15, and contributes to the overall Cigna Hospital Quality Index for the assessment of vaginal delivery hospital performance.

### HCAHPS summary star rating index

We construct the HCAHPS summary star rating index using the HCAHPS Summary Star Rating from the CMS Hospital Compare database. It represents the average of all of the star ratings:

- From each of the seven HCAHPS composite measures (Communication with Nurses, Communication with Doctors, Responsiveness of Hospital Staff, Pain Management, Communication about Medicines, Discharge Information, and Care Transition)
- Assigned to Cleanliness of Hospital Environment and Quietness of Hospital Environment
- Assigned to Overall Hospital Rating and Recommend the Hospital

We construct the raw index using the HCAHPS Summary Star score for the hospital. This score can be a 1, 2, 3, 4, or 5, where a higher score is better. The score is inverted to create the index, since a lower index score is better (i.e., a HCAHPS score of 5 becomes a 1, 4 becomes a 2, 3 remains a 3, 2 becomes a 4, and 1 becomes a 5). We then divide the inverted score by the national average HCAHPS summary star rating core to produce the index. *(Note: We evaluate teaching and non-teaching hospitals separately.)* We then trim the index so that any index value greater than 1.5 is assigned a value of 1.5, and any index value less than 0.5 is assigned a value of 0.5. This helps prevent skewing of the overall Cigna Hospital Quality Index.

You can find more information about the HCAHPS summary star rating by visiting the Hospital Compare website at [Medicare.gov](https://www.medicare.gov) > Find hospitals > About Hospital Compare > About the data > [Survey of patients' experiences \(HCAHPS\)](#).

## Leapfrog Hospital Safety Score index

We construct this index using the Hospital Safety Score from The Leapfrog Group.

The Leapfrog Hospital Safety Score uses 30 measures (including both process and outcome measures) from its Leapfrog Hospital Survey, AHRQ, Centers for Disease Control and Prevention (CDC), CMS, and American Hospital Association (AHA) to produce a single score. This score can be an A, B, C, D, or F, where "A" is the best score. We convert the score to a number (i.e., a Leapfrog Hospital Safety Score of A becomes a 1, B becomes a 2, C becomes a 3, D becomes a 4, and F becomes a 5). We then divide the converted score by the national average Hospital Safety Score to produce the index. *(Note: We evaluate teaching and non-teaching hospitals separately.)* We then trim the index so that any index value greater than 1.5 is assigned a value of 1.5 and any index value less than 0.5 is assigned a value of 0.5. This helps prevent skewing of the overall Cigna Hospital Quality Index.

The Leapfrog Hospital Safety Score index is based on data from April 1, 2016 through December 31, 2016. Visit the Leapfrog Hospital Safety Grade website at [HospitalSafetyGrade.org](https://www.hospitalgrade.org) to compare scores for over 2,500 hospitals.

## Patient outcomes: Cigna Hospital Quality Index calculation and scoring

We calculate the overall Cigna Hospital Quality Index composite score as described below.

### Cigna Hospital Quality Index =

(Complications index x Complications weighting) + (Mortality index x Mortality weighting) + (CMS HAI index x CMS HAI weighting) + (CMS readmission rate index x CMS readmission weight index weighting) + (Hospital-wide readmission index x Hospital-wide readmission weighting) + (HCAHPS index x HCAHPS weighting) + (Primary cesarean-section delivery rate index x Primary cesarean-section delivery rate index weighting) + (Early elective delivery index x Early elective delivery weighting) + (Leapfrog index x Leapfrog weighting)

We then rank the hospital quality indices for all hospitals we evaluate in numerical order within a medical condition or category, and separate them into three performance categories according to the following distribution:

Bottom 25 percent	One quality star (*)
Middle 60 percent	Two quality stars (**)
Top 15 percent	Three quality stars (***)

Quality stars for patient outcomes display in the online provider directories on Cigna.com and myCigna.com. Because we evaluate hospital performance for each condition and procedure separately, we may award a

given hospital one star (below average), two stars (average), or three stars (above average) for certain conditions and procedures.

To help ensure hospital data is annually stable, we establish a “stable volume threshold.” This helps to mitigate the variation in a hospital’s rankings from year to year, and provides a volume baseline for use when comparing data in future years.

We also use volume as an indirect indicator of quality. There is evidence suggesting that, “Hospitals performing more of certain intensive, high-technology, or highly complex procedures may have better outcomes for those procedures.” (AHRQ IQI Guide, V 2.1, Rev 4, Dec 22, 2004.) We may therefore remove from consideration hospitals that have suspect or questionable quality due to low admission volumes, since this can lead to more variation in the outcomes of those admissions.

## **Cigna bariatric surgery designations**

Cigna has two bariatric center designations – a 3 Star Quality designation and a COE designation.

### **3 Star Quality Bariatric Center program requirements**

To achieve a 3-Star Quality designation, the bariatric treatment facility must:

- Have an active status with Cigna as a participating network bariatric treatment center.
- Be Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP)-accredited in either Comprehensive or Comprehensive with Adolescent accreditation types.

### **Cigna Bariatric COE designation requirements**

To achieve the COE designation, the bariatric treatment facility must meet the 3 Star Quality Bariatric Center program requirements listed above, PLUS:

- Receive two or three stars for cost efficiency.
- Have minimum volume criteria for cost-efficiency evaluation in at least 50 inpatient bariatric procedures during the assessment period.

We identify 3-Star Quality and COE-designated bariatric treatment facilities in our online directories on [Cigna.com](http://Cigna.com) and [myCigna.com](http://myCigna.com).

### **About the MBSAQIP**

The MBSAQIP works to advance safe, high-quality care for bariatric surgical patients through the accreditation of bariatric surgical centers. A center can achieve accreditation by following a rigorous review process during which a center proves that it can maintain certain physical resources, human resources, and standards of practice. All accredited centers report their outcomes to the MBSAQIP database.

## **Hospital cost-efficiency score calculation**

The cost-efficiency score is a measure of a hospital’s average cost for a particular procedure or condition that has been severity adjusted for national comparison. Physicians’ fees and outpatient services are not included in this score.

We model the cost-efficiency score for each procedure or condition within each hospital. This enables us to compare the average condition or procedure costs for different hospitals with different payment mechanisms (such as per diem rate, case rate, or discount from charges) to one another. We are thereby able to compare the cost-efficiency performance of hospitals with different payment types in the same market.

The average cost reflects both the rates that a hospital charges, and the average time a customer spends in the hospital for a specific surgical procedure or medical condition. A variety of factors may affect the cost-efficiency score for a medical condition or surgical procedure, including geographic cost differences (e.g., major metropolitan areas typically have higher costs compared to rural areas) and the cost information used to calculate the national average cost.

For each hospital we evaluate, we perform two separate evaluations for COE to model the average inpatient cost for each COE procedure or condition:

1. Hospital-specific Open Access Plus contracted rates in effect as of January 1, 2018, and
2. Hospital-specific LocalPlus® contracted rates in effect as of January 1, 2018 (as applicable).

To assist us with this modeling, we use Scenario®, a software package that we developed. The rate calculations the Scenario modeling tool uses include DRG exceptions, stop-loss limits, and applicable carve-outs.

Based on the specific hospital contract for each facility, Scenario calculates the modeled average cost for each condition or procedure within the facility by case rate, a per diem, or a discount from billed charges, depending on the type of rate applicable for a given hospital.

For case rates, the cost-efficiency score is equal to the case rate modeled through Scenario. There are no additional adjustments or calculations for case rates, and no severity adjustments are applied.

- **Example 1**

Scenario returns a CASE RATE of \$15,000 for a knee replacement at hospital X. The cost-efficiency score is \$15,000.

For a per diem, we use the average length of stay data – which is publicly available on the All-Payer and Medicare databases for each hospital we evaluate for each condition – to calculate the cost-efficiency score. We apply a severity adjustment based on APR-DRGs to the average length of stay for each facility and for each condition. We calculate the cost-efficiency score by multiplying the per diem rate (derived from Scenario) by the severity-adjusted average length of stay from the All-payer and Medicare databases.

- **Example 2**

Scenario returns a PER DIEM RATE of \$4,000 per day for a knee replacement at hospital Y. The average length of stay for a knee replacement at Hospital Y is three days. After applying the APR-DRG severity adjustment, the adjusted average length of stay is four days. The cost-efficiency score is \$16,000 ( $\$4,000$  [per diem rate]  $\times$  4 [severity-adjusted average length of stay]).

For a discount arrangement, we use the average charge data – which is publicly available on the All-Payer and Medicare databases for each hospital we evaluate for each condition – to calculate the cost-efficiency score. We apply a severity adjustment based on APR-DRGs to this average charge for each facility and for each condition. We calculate the cost-efficiency score by multiplying the discount rate (derived from Scenario) by the severity-adjusted average charge from the All-Payer and Medicare databases.

- **Example 3**

Scenario returns a DISCOUNT RATE of 30 percent for a knee replacement at hospital Z. The average charge from the All-Payer database for a knee replacement at hospital Z is \$26,000. After applying the APR-DRG severity adjustment, the adjusted average charge is \$27,000. The cost-efficiency score is \$18,900 ( $\$27,000$  severity adjusted average charge)  $\times$  (0.7 [1 - the discount rate of 30 percent]).

We use the modeled average cost for a given hospital for a specific medical condition or procedure to assess hospital results in each geographic market as detailed in the following section. For the purpose of cost-efficiency comparisons, we do not analyze teaching and non-teaching hospitals separately. We

display the modeled average hospital cost as a range for a given medical condition or procedure in the online hospital directory.

## Hospital cost-efficiency score ranking

We rank the cost-efficiency scores (modeled average costs for a specific medical condition or procedure) in numerical order for all hospitals we evaluate in a geographic market. We then separate them into three performance categories according to the following distribution:

Bottom 33 percent	Highest average cost	One cost-efficiency star (*)
Middle 33 percent	Intermediate average cost	Two cost-efficiency stars (**)
Top 33 percent	Lowest average cost	Three cost-efficiency stars (***)

The distribution of condition or procedure average costs determines the number of cost-efficiency stars displayed online.

Because we calculate a hospital's cost-efficiency score for each individual medical condition and surgical procedure we evaluate under the Cigna COE program, it is possible (and quite common) for a given hospital to be awarded different numbers of cost-efficiency stars for different conditions and procedures.

## Market-level hospital comparisons

We perform COE cost-efficiency and quality outcome evaluations at the market level. To determine the cost and quality star ratings, we compare and rank the cost and quality measures for hospitals and conditions within each market (adjusted cost for efficiency and quality index for outcomes). If there are less than three hospitals that meet the minimum volume threshold within the market for a given condition, then the cost efficiency and quality outcomes comparisons and rankings are performed against all hospitals nationally that meet the minimum volume threshold for the condition.

## No results shown

Hospital data may not display in the online provider directory for many reasons, including, but not limited to, the following:

- There is insufficient patient volume, or All-Payer or MedPAR data available, for that procedure or condition.
- The hospital does not perform the surgical procedure or treat the condition.
- Contract limitation prohibits display of cost and quality data.

## Academic teaching and community hospitals

We calculate and adjust the quality index components on a national level using peer averages based on either teaching/academic or community hospital peer groups, as applicable, to develop the quality index for each condition or procedure. Once we create the quality index for each condition or procedure, we rank the hospitals within their market based on their quality index composite score for the condition or procedure.

## Updating COE and hospital value tool data

We generally analyze and refresh the Cigna COE and hospital value tool data annually. While we make every attempt to use the best available data and nationally recognized standards, we acknowledge that patient outcomes and cost-efficiency standards continue to evolve. Accordingly, we encourage our customers not to use this information as the sole basis for decision-making, and to consult with their treating physician when selecting a hospital.

## Process for hospitals to request results

Hospitals should contact their Cigna Contractor or call Cigna Customer Service at 1.800.88Cigna (882.4462) for a copy of their specific results.

## Process for hospitals to correct errors or request reconsideration

Hospitals should email [PhysicianEvaluationInformationRequest@Cigna.com](mailto:PhysicianEvaluationInformationRequest@Cigna.com) or send a fax to 1.866.448.5506 to:

- Request to review data
- Request to review patient outcomes
- Request to review cost-efficiency ratings
- Request reconsideration
- Correct errors
- Submit additional information for review and reconsideration

The facility name, the Taxpayer Identification Number (TIN), and the name and phone number of the person making the request must be included in the fax or email. A Cigna Network Clinical Manager or Specialist will contact the requestor to discuss the request, and to initiate the Selection Review Committee review process. The Selection Review Committee will meet within 30 days of receipt of the submitted documentation, and provide a written response to the requested review.

## Process to provide feedback

We encourage Cigna customers, employer groups, and network-participating physicians and hospitals to provide feedback and improvement suggestions. Customers should call the telephone number listed on the back of their Cigna ID card. Participating physicians and hospitals may provide feedback by email to [PhysicianEvaluationInformationRequest@Cigna.com](mailto:PhysicianEvaluationInformationRequest@Cigna.com), or by fax to 1.866.448.5506. We review and implement methodology changes annually.

## American Hospital Association #123 for Equity Pledge Campaign (informational only)

Your hospital summary report will reference the AHA #123 for Equity Pledge campaign. America's hospitals and health systems are working hard to ensure that every person in every community receives high quality, equitable and safe care. In 2015, the AHA launched its #123forEquity pledge campaign. It builds on the efforts of the National Call to Action to Eliminate Health Care Disparities – a joint effort of the AHA, American College of Healthcare Executives, Association of American Medical Colleges, Catholic Health Association of the United States and America's Essential Hospitals – and asks hospital and health system leaders to begin taking action to accelerate progress on the following areas:

- Increasing the collection and use of race, ethnicity, language preference and other socio-demographic data
- Increasing cultural competency training
- Increasing diversity in leadership and governance
- Improve and strengthen community partnerships

Hospitals and health systems also can take the pledge and commit to working on efforts within their organization or in the community related to health equity, diversity, and inclusion even if the efforts do not fit clearly under one of the pledge goals listed above.

Pledge data is not currently included in COE evaluation and is for informational purposes only. For more information about the #123 for Equity Pledge, go to [www.equityofcare.org](http://www.equityofcare.org).

## APPENDIX

### Appendix 1: Data sources for COE

#### All-Payer data states (2014-2015)

Vermont
---------

#### All-Payer data states (2015-2016)

Colorado	Oregon
Florida	Pennsylvania
Iowa	Rhode Island
Maryland	Texas
Nevada	Virginia
New York	Washington
North Carolina	Wisconsin

#### MedPAR data states (2015-2016)

Alabama	Indiana	New Hampshire
Alaska	Kansas	New Jersey
Arizona	Kentucky	New Mexico
Arkansas	Louisiana	North Dakota
California	Maine	Ohio
Delaware	Massachusetts	Oklahoma
Connecticut	Michigan	South Carolina
District of Columbia	Minnesota	South Dakota
Georgia	Mississippi	Tennessee
Hawaii	Missouri	West Virginia
Idaho	Montana	Wyoming
Illinois	Nebraska	Utah



## Appendix 2: Condition and procedure population specifications

#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs		ICD-10 procedure codes	ICD-10 diagnosis codes
1	Cancer conditions	9,12	995	Surg	CMS HAI <sup>1</sup> index Hosp_Wide Readmit HCAHPS	579, 580, 581, 582, 583	<b>a n d</b>	2P= 0HTT0ZZ, 0HTU0ZZ, 0HTV0ZZ, 07T50ZZ, 07T60ZZ, 0KTH0ZZ, 0KTJ0ZZ, 07T70ZZ, 07T80ZZ, 07T90ZZ, 0HBT0ZZ, 0HBT3ZZ, 0HBU0ZZ, 0HBU3ZZ, 0H0V0JZ, 0H0V3JZ, 0HBV0ZZ, 0HBV3ZZ	<b>a n d</b>  2D=C50019, C50119, C50219, C50319, C50419, C50519, C50619, C50819, C50919, C50029, C50929, D0590
						<b>OR</b>			
						665, 666, 667, 707, 708	<b>a n d</b>	PP=0VT00ZZ, 0VT04ZZ, 0VT07ZZ, 0VT08ZZ, 0VT30ZZ, 0VT34ZZ, 0VB00ZZ, 0VB03ZZ, 0VB04ZZ, 0V500ZZ, 0V503ZZ, 0V504ZZ	
2	Mastectomy, total/simple	9	155	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	579, 580, 581, 582, 583	<b>a n d</b>	2P= 0HTT0ZZ, 0HTU0ZZ, 0HTV0ZZ, 07T50ZZ, 07T60ZZ, 0KTH0ZZ, 0KTJ0ZZ, 07T70ZZ, 07T80ZZ, 07T90ZZ, 0HBT0ZZ, 0HBT3ZZ, 0HBU0ZZ, 0HBU3ZZ, 0H0V0JZ, 0H0V3JZ, 0HBV0ZZ, 0HBV3ZZ	<b>a n d</b>  2D=C50019, C50119, C50219, C50319, C50419, C50519, C50619, C50819, C50919, C50029, C50929, D0590
3	Prostatectomy, radical	12	126	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	665, 666, 667, 707, 708	<b>a n d</b>	PP=0VT00ZZ, 0VT04ZZ, 0VT07ZZ, 0VT08ZZ, 0VT30ZZ, 0VT34ZZ, 0VB00ZZ, 0VB03ZZ, 0VB04ZZ, 0V500ZZ, 0V503ZZ, 0V504ZZ	
4	Cardiac catheterization and angioplasty	5	993	Med Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	246, 247, 248, 249, 250, 251, 286, 287	<b>a n d</b>	PP=02703ZZ, 02704ZZ, 02713ZZ, 02714ZZ, 02723ZZ, 02724ZZ, 02733ZZ, 02734ZZ	
5	Angioplasty, with and without stent	5	8	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	246, 247, 248, 249, 250, 251	<b>a n d</b>	PP=02703ZZ, 02704ZZ, 02713ZZ, 02714ZZ, 02723ZZ, 02724ZZ, 02733ZZ, 02734ZZ	
6	Cardiac catheterization	5	23	Med	HCAHPS	286, 287			
7	Deliveries	14	996	Surg	CMS HAI Early Elective Delivery index HCAHPS	765, 766, 767, 768, 774, 775			
8	Cesarean section	14	29	Surg	CMS HAI Early Elective	765, 766			



#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs		ICD-10 procedure codes	ICD-10 diagnosis codes
					Delivery index HCAHPS				
9	Vaginal delivery	14	166	Med	Early Elective Delivery index HCAHPS	767, 768, 774, 775			
10	Heart surgery	5	997	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	216, 217, 218, 219, 220, 221, 231, 232, 233, 234, 235, 236, 266, 267	a n d	PP=02RF07Z, 02RF08Z, 02RF0JZ, 02RF0KZ, 02RF37Z, 02RF38Z, 02RF3JZ, 02RF3KZ, 02RF47Z, 02RF48Z, 02RF4JZ, 02RF4KZ, 02RG07Z, 02RG08Z, 02RG0JZ, 02RG0KZ, 02RG37H, 02RG37Z, 02RG38H, 02RG38Z, 02RG3JH, 02RG3JZ, 02RG3KH, 02RG3KZ, 02RG47Z, 02RG48Z, 02RG4JZ, 02RG4KZ, 02RH07Z, 02RH08Z, 02RH0JZ, 02RH0KZ, 02RH37Z, 02RH38Z, 02RH3JZ, 02RH3KZ, 02RH47Z, 02RH48Z, 02RH4JZ, 02RH4KZ, 02RJ07Z, 02RJ08Z, 02RJ0JZ, 02RJ0KZ, 02RJ47Z, 02RJ48Z, 02RJ4JZ, 02RJ4KZ, 02UG3JZ, 02RF37H, 02RF37Z, 02RF38H, 02RF3JH, 02RF3KH, 02RG3JZ, 02RH37H, 02RH38H, 02RH3JH, 02RH3KH	
11	Coronary artery bypass surgery	5	40	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	231, 232, 233, 234, 235, 236			
12	Heart valve replacement	5	79	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	216, 217, 218, 219, 220, 221, 266, 267	a n d	PP=02RF07Z, 02RF08Z, 02RF0JZ, 02RF0KZ, 02RF37Z, 02RF38Z, 02RF3JZ, 02RF3KZ, 02RF47Z, 02RF48Z, 02RF4JZ, 02RF4KZ, 02RG07Z, 02RG08Z, 02RG0JZ, 02RG0KZ, 02RG37H, 02RG37Z, 02RG38H, 02RG38Z, 02RG3JH, 02RG3JZ, 02RG3KH, 02RG3KZ, 02RG47Z, 02RG48Z, 02RG4JZ, 02RG4KZ, 02RH07Z, 02RH08Z, 02RH0JZ, 02RH0KZ, 02RH37Z, 02RH38Z, 02RH3JZ, 02RH3KZ, 02RH47Z, 02RH48Z, 02RH4JZ, 02RH4KZ, 02RJ07Z, 02RJ08Z, 02RJ0JZ, 02RJ0KZ, 02RJ47Z, 02RJ48Z, 02RJ4JZ, 02RJ4KZ, 02UG3JZ, 02RF37H, 02RF37Z, 02RF38H, 02RF3JH, 02RF3KH, 02RG3JZ, 02RH37H, 02RH38H, 02RH3JH, 02RH3KH	
13	Joint replacement	8	998	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	466, 467, 468, 469, 470	a n d	PP=0SP909Z, 0SP90JZ, 0SPB09Z, 0SPB0JZ, 0SR9019, 0SR901A, 0SR901Z, 0SR9029, 0SR902A, 0SR902Z, 0SR9039, 0SR903A, 0SR903Z, 0SR90J9, 0SR90JA, 0SR90JZ, 0SRA009, 0SRA00A, 0SRA00Z, 0SRA019, 0SRA01A, 0SRA01Z, 0SRA039, 0SRA03A, 0SRA03Z, 0SRA07Z, 0SRA0J9, 0SRA0JA, 0SRA0JZ, 0SRA0KZ, 0SRB019, 0SRB01A, 0SRB01Z, 0SRB029, 0SRB02A, 0SRB02Z, 0SRB039, 0SRB03A, 0SRB03Z, 0SRB0J9, 0SRB0JA, 0SRB0JZ, 0SRE009, 0SRE00A, 0SRE00Z, 0SRE019, 0SRE01A, 0SRE01Z, 0SRE039, 0SRE03A, 0SRE03Z, 0SRE07Z, 0SRE0J9, 0SRE0JA, 0SRE0JZ, 0SRE0KZ, 0SRR019, 0SRR01A, 0SRR01Z, 0SRR039,	

#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs	ICD-10 procedure codes	ICD-10 diagnosis codes
							0SRR03A, 0SRR03Z, 0SRR07Z, 0SRR0J9, 0SRR0JA, 0SRR0JZ, 0SRR0KZ, 0SRS019, 0SRS01A, 0SRS01Z, 0SRS039, 0SRS03A, 0SRS03Z, 0SRS07Z, 0SRS0J9, 0SRS0JA, 0SRS0JZ, 0SRS0KZ, 0SU909Z, 0SUA09Z, 0SUA0BZ, 0SUB09Z, 0SUE09Z, 0SUE0BZ, 0SUR09Z, 0SUR0BZ, 0SUS09Z, 0SUS0BZ, 0SW90JZ, 0SW93JZ, 0SW94JZ, 0SWB0JZ, 0SWB3JZ, 0SWB4JZ,	
<b>OR</b>								
						461, 462, 466, 467, 468, 469, 470	<b>a n d</b> PP=0QRD0JZ, 0QRD3JZ, 0QRD4JZ, 0QRF0JZ, 0QRF3JZ, 0QRF4JZ, 0QUD0JZ, 0QUD3JZ, 0QUD4JZ, 0QUF0JZ, 0QUF3JZ, 0QUF4JZ, 0SRC07Z, 0SRC0J9, 0SRC0JA, 0SRC0JZ, 0SRC0KZ, 0SRD07Z, 0SRD0J9, 0SRD0JA, 0SRD0JZ, 0SRT07Z, 0SRT0JZ, 0SRT0KZ, 0SRU07Z, 0SRU0JZ, 0SRU0KZ, 0SRV07Z, 0SRV0JZ, 0SRV0KZ, 0SRW07Z, 0SRW0JZ, 0SRW0KZ, 0SUC09C, 0SUD09C	
14	Hip replacement	8	87	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	466, 467, 468, 469, 470	<b>a n d</b> PP=0SP909Z, 0SP90JZ, 0SPB09Z, 0SPB0JZ, 0SR9019, 0SR901A, 0SR901Z, 0SR9029, 0SR902A, 0SR902Z, 0SR9039, 0SR903A, 0SR903Z, 0SR90J9, 0SR90JA, 0SR90JZ, 0SRA009, 0SRA00A, 0SRA00Z, 0SRA019, 0SRA01A, 0SRA01Z, 0SRA039, 0SRA03A, 0SRA03Z, 0SRA07Z, 0SRA0J9, 0SRA0JA, 0SRA0JZ, 0SRA0KZ, 0SRB019, 0SRB01A, 0SRB01Z, 0SRB029, 0SRB02A, 0SRB02Z, 0SRB039, 0SRB03A, 0SRB03Z, 0SRB0J9, 0SRB0JA, 0SRB0JZ, 0SRE009, 0SRE00A, 0SRE00Z, 0SRE019, 0SRE01A, 0SRE01Z, 0SRE039, 0SRE03A, 0SRE03Z, 0SRE07Z, 0SRE0J9, 0SRE0JA, 0SRE0JZ, 0SRE0KZ, 0SRR019, 0SRR01A, 0SRR01Z, 0SRR039, 0SRR03A, 0SRR03Z, 0SRR07Z, 0SRR0J9, 0SRR0JA, 0SRR0JZ, 0SRR0KZ, 0SRS019, 0SRS01A, 0SRS01Z, 0SRS039, 0SRS03A, 0SRS03Z, 0SRS07Z, 0SRS0J9, 0SRS0JA, 0SRS0JZ, 0SRS0KZ, 0SU909Z, 0SUA09Z, 0SUA0BZ, 0SUB09Z, 0SUE09Z, 0SUE0BZ, 0SUR09Z, 0SUR0BZ, 0SUS09Z, 0SUS0BZ, 0SW90JZ, 0SW93JZ, 0SW94JZ, 0SWB0JZ, 0SWB3JZ, 0SWB4JZ	
15	Knee replacement	8	95	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	461, 462, 466, 467, 468, 469, 470	<b>a n d</b> PP=0QRD0JZ, 0QRD3JZ, 0QRD4JZ, 0QRF0JZ, 0QRF3JZ, 0QRF4JZ, 0QUD0JZ, 0QUD3JZ, 0QUD4JZ, 0QUF0JZ, 0QUF3JZ, 0QUF4JZ, 0SRC07Z, 0SRC0J9, 0SRC0JA, 0SRC0JZ, 0SRC0KZ, 0SRD07Z, 0SRD0J9, 0SRD0JA, 0SRD0JZ, 0SRT07Z, 0SRT0JZ, 0SRT0KZ, 0SRU07Z, 0SRU0JZ, 0SRU0KZ, 0SRV07Z, 0SRV0JZ, 0SRV0KZ, 0SRW07Z, 0SRW0JZ, 0SRW0KZ, 0SUC09C, 0SUD09C	

#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs	ICD-10 procedure codes	ICD-10 diagnosis codes
16	Orthopedic back surgery	1, 8	991	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	028, 029, 030, 456, 457, 458, 459, 460, 471, 472, 473	<b>a</b> <b>n</b> <b>d</b> PP=0RG0070, 0RG0071, 0RG007J, 0RG00J0, 0RG00J1, 0RG00JJ, 0RG00K0, 0RG00K1, 0RG00KJ, 0RG00Z0, 0RG00Z1, 0RG00ZJ, 0RG0370, 0RG0371, 0RG037J, 0RG03J0, 0RG03J1, 0RG03JJ, 0RG03K0, 0RG03K1, 0RG03KJ, 0RG03Z0, 0RG03Z1, 0RG03ZJ, 0RG0470, 0RG0471, 0RG047J, 0RG04J0, 0RG04J1, 0RG04JJ, 0RG04K0, 0RG04K1, 0RG04KJ, 0RG04Z0, 0RG04Z1, 0RG04ZJ, 0RG1070, 0RG1071, 0RG107J, 0RG10J0, 0RG10J1, 0RG10JJ, 0RG10K0, 0RG10K1, 0RG10KJ, 0RG10Z0, 0RG10Z1, 0RG10ZJ, 0RG1370, 0RG1371, 0RG137J, 0RG13J0, 0RG13J1, 0RG13JJ, 0RG13K0, 0RG13K1, 0RG13KJ, 0RG13Z0, 0RG13Z1, 0RG13ZJ, 0RG1470, 0RG1471, 0RG147J, 0RG14J0, 0RG14J1, 0RG14JJ, 0RG14K0, 0RG14K1, 0RG14KJ, 0RG14Z0, 0RG14Z1, 0RG14ZJ, 0RG4070, 0RG4071, 0RG407J, 0RG40J0, 0RG40J1, 0RG40JJ, 0RG40K0, 0RG40K1, 0RG40KJ, 0RG40Z0, 0RG40Z1, 0RG40ZJ, 0RG4370, 0RG4371, 0RG437J, 0RG43J0, 0RG43J1, 0RG43JJ, 0RG43K0, 0RG43K1, 0RG43KJ, 0RG43Z0, 0RG43Z1, 0RG43ZJ, 0RG4470, 0RG4471, 0RG447J, 0RG44J0, 0RG44J1, 0RG44JJ, 0RG44K0, 0RG44K1, 0RG44KJ, 0RG44Z0, 0RG44Z1, 0RG44ZJ, 0RG6070, 0RG6071, 0RG607J, 0RG60J0, 0RG60J1, 0RG60JJ, 0RG60K0, 0RG60K1, 0RG60KJ, 0RG60Z0, 0RG60Z1, 0RG60ZJ, 0RG6370, 0RG6371, 0RG637J, 0RG63J0, 0RG63J1, 0RG63JJ, 0RG63K0, 0RG63K1, 0RG63KJ, 0RG63Z0, 0RG63Z1, 0RG63ZJ, 0RG6470, 0RG6471, 0RG647J, 0RG64J0, 0RG64J1, 0RG64JJ, 0RG64K0, 0RG64K1, 0RG64KJ, 0RG64Z0, 0RG64Z1, 0RG64ZJ, 0RGA070, 0RGA071, 0RGA07J, 0RGA0J0, 0RGA0J1, 0RGA0JJ, 0RGA0K0, 0RGA0K1, 0RGA0KJ, 0RGA0Z0, 0RGA0Z1, 0RGA0ZJ, 0RGA370, 0RGA371, 0RGA37J, 0RGA3J0, 0RGA3J1, 0RGA3JJ, 0RGA3K0, 0RGA3K1, 0RGA3KJ, 0RGA3Z0, 0RGA3Z1, 0RGA3ZJ, 0RGA470, 0RGA471, 0RGA47J, 0RGA4J0, 0RGA4J1, 0RGA4JJ, 0RGA4K0, 0RGA4K1, 0RGA4KJ, 0RGA4Z0, 0RGA4Z1, 0RGA4ZJ, 0SG0070, 0SG0071, 0SG007J, 0SG00J0, 0SG00J1, 0SG00JJ, 0SG00K0, 0SG00K1, 0SG00KJ, 0SG00Z0, 0SG00Z1, 0SG00ZJ, 0SG0370, 0SG0371, 0SG037J, 0SG03J0, 0SG03J1, 0SG03JJ, 0SG03K0, 0SG03K1, 0SG03KJ, 0SG03Z0, 0SG03Z1, 0SG03ZJ, 0SG0470, 0SG0471, 0SG047J, 0SG04J0, 0SG04J1, 0SG04JJ, 0SG04K0, 0SG04K1, 0SG04KJ, 0SG04Z0, 0SG04Z1, 0SG04ZJ, 0SG3070, 0SG3071, 0SG307J, 0SG30J0, 0SG30J1, 0SG30JJ, 0SG30K0, 0SG30K1, 0SG30KJ, 0SG30Z0, 0SG30Z1, 0SG30ZJ, 0SG3370, 0SG3371, 0SG337J, 0SG33J0, 0SG33J1, 0SG33JJ, 0SG33K0, 0SG33K1, 0SG33KJ, 0SG33Z0, 0SG33Z1,	

#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs	ICD-10 procedure codes	ICD-10 diagnosis codes
							0SG33ZJ, 0SG3470, 0SG3471, 0SG347J, 0SG34J0, 0SG34J1, 0SG34JJ, 0SG34K0, 0SG34K1, 0SG34KJ, 0SG34Z0, 0SG34Z1, 0SG34ZJ, 0SG504Z, 0SG507Z, 0SG50JZ, 0SG50KZ, 0SG50ZZ, 0SG534Z, 0SG537Z, 0SG53JZ, 0SG53KZ, 0SG53ZZ, 0SG544Z, 0SG547Z, 0SG54JZ, 0SG54KZ, 0SG54ZZ, 0SG604Z, 0SG607Z, 0SG60JZ, 0SG60KZ, 0SG60ZZ, 0SG634Z, 0SG637Z, 0SG63JZ, 0SG63KZ, 0SG63ZZ, 0SG644Z, 0SG647Z, 0SG64JZ, 0SG64KZ, 0SG64ZZ, 0SG704Z, 0SG707Z, 0SG70JZ, 0SG70KZ, 0SG70ZZ, 0SG734Z, 0SG737Z, 0SG73JZ, 0SG73KZ, 0SG73ZZ, 0SG744Z, 0SG747Z, 0SG74JZ, 0SG74KZ, 0SG74ZZ, 0SG804Z, 0SG807Z, 0SG80JZ, 0SG80KZ, 0SG80ZZ, 0SG834Z, 0SG837Z, 0SG83JZ, 0SG83KZ, 0SG83ZZ, 0SG844Z, 0SG847Z, 0SG84JZ, 0SG84KZ, 0SG84ZZ	
<b>OR</b>								
						028, 029, 030, 490, 491, 518, 519, 520	PP=0R530ZZ, 0R533ZZ, 0R534ZZ, 0R550ZZ, 0R553ZZ, 0R554ZZ, 0R590ZZ, 0R593ZZ, 0R594ZZ, 0R5B0ZZ, 0R5B3ZZ, 0R5B4ZZ, 0RB30ZZ, 0RB33ZZ, 0RB34ZZ, 0RB50ZZ, 0RB53ZZ, 0RB54ZZ, 0RB90ZZ, 0RB93ZZ, 0RB94ZZ, 0RBB0ZZ, 0RBB3ZZ, 0RBB4ZZ, 0RQ30ZZ, 0RQ90ZZ, 0RQB0ZZ, 0RT30ZZ, 0RT40ZZ, 0RT50ZZ, 0RT90ZZ, 0RTB0ZZ, 0RU307Z, 0RU30JZ, 0RU30KZ, 0RU337Z, 0RU33JZ, 0RU33KZ, 0RU347Z, 0RU34JZ, 0RU34KZ, 0RU907Z, 0RU90JZ, 0RU90KZ, 0RU937Z, 0RU93JZ, 0RU93KZ, 0RU947Z, 0RU94JZ, 0RU94KZ, 0RUB07Z, 0RUB0JZ, 0RUB0KZ, 0RUB37Z, 0RUB3JZ, 0RUB3KZ, 0RUB47Z, 0RUB4JZ, 0RUB4KZ, 0S520ZZ, 0S523ZZ, 0S524ZZ, 0S540ZZ, 0S543ZZ, 0S544ZZ, 0SB20ZZ, 0SB23ZZ, 0SB24ZZ, 0SB40ZZ, 0SB43ZZ, 0SB44ZZ, 0SQ20ZZ, 0SQ40ZZ, 0ST20ZZ, 0ST40ZZ, 0SU207Z, 0SU20JZ, 0SU20KZ, 0SU237Z, 0SU23JZ, 0SU23KZ, 0SU247Z, 0SU24JZ, 0SU24KZ, 0SU407Z, 0SU40JZ, 0SU40KZ, 0SU437Z, 0SU43JZ, 0SU43KZ, 0SU447Z, 0SU44JZ, 0SU44KZ	
17	Disc surgery	8	51	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	028, 029, 030, 490, 491, 518, 519, 520	PP=0R530ZZ, 0R533ZZ, 0R534ZZ, 0R550ZZ, 0R553ZZ, 0R554ZZ, 0R590ZZ, 0R593ZZ, 0R594ZZ, 0R5B0ZZ, 0R5B3ZZ, 0R5B4ZZ, 0RB30ZZ, 0RB33ZZ, 0RB34ZZ, 0RB50ZZ, 0RB53ZZ, 0RB54ZZ, 0RB90ZZ, 0RB93ZZ, 0RB94ZZ, 0RBB0ZZ, 0RBB3ZZ, 0RBB4ZZ, 0RQ30ZZ, 0RQ90ZZ, 0RQB0ZZ, 0RT30ZZ, 0RT40ZZ, 0RT50ZZ, 0RT90ZZ, 0RTB0ZZ, 0RU307Z, 0RU30JZ, 0RU30KZ, 0RU337Z, 0RU33JZ, 0RU33KZ, 0RU347Z, 0RU34JZ, 0RU34KZ, 0RU907Z, 0RU90JZ, 0RU90KZ, 0RU937Z, 0RU93JZ, 0RU93KZ, 0RU947Z, 0RU94JZ, 0RU94KZ, 0RUB07Z, 0RUB0JZ, 0RUB0KZ, 0RUB37Z, 0RUB3JZ, 0RUB3KZ, 0RUB47Z, 0RUB4JZ, 0RUB4KZ, 0S520ZZ,	

#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs	ICD-10 procedure codes	ICD-10 diagnosis codes
							0S523ZZ, 0S524ZZ, 0S540ZZ, 0S543ZZ, 0S544ZZ, 0SB20ZZ, 0SB23ZZ, 0SB24ZZ, 0SB40ZZ, 0SB43ZZ, 0SB44ZZ, 0SQ20ZZ, 0SQ40ZZ, 0ST20ZZ, 0ST40ZZ, 0SU207Z, 0SU20JZ, 0SU20KZ, 0SU237Z, 0SU23JZ, 0SU23KZ, 0SU247Z, 0SU24JZ, 0SU24KZ, 0SU407Z, 0SU40JZ, 0SU40KZ, 0SU437Z, 0SU43JZ, 0SU43KZ, 0SU447Z, 0SU44JZ, 0SU44KZ	
18	Spinal fusion	1	143	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	028, 029, 030, 456, 457, 458, 459, 460, 471, 472, 473	and PP=0RG0070, 0RG0071, 0RG007J, 0RG00J0, 0RG00J1, 0RG00JJ, 0RG00K0, 0RG00K1, 0RG00KJ, 0RG00Z0, 0RG00Z1, 0RG00ZJ, 0RG0370, 0RG0371, 0RG037J, 0RG03J0, 0RG03J1, 0RG03JJ, 0RG03K0, 0RG03K1, 0RG03KJ, 0RG03Z0, 0RG03Z1, 0RG03ZJ, 0RG0470, 0RG0471, 0RG047J, 0RG04J0, 0RG04J1, 0RG04JJ, 0RG04K0, 0RG04K1, 0RG04KJ, 0RG04Z0, 0RG04Z1, 0RG04ZJ, 0RG1070, 0RG1071, 0RG107J, 0RG10J0, 0RG10J1, 0RG10JJ, 0RG10K0, 0RG10K1, 0RG10KJ, 0RG10Z0, 0RG10Z1, 0RG10ZJ, 0RG1370, 0RG1371, 0RG137J, 0RG13J0, 0RG13J1, 0RG13JJ, 0RG13K0, 0RG13K1, 0RG13KJ, 0RG13Z0, 0RG13Z1, 0RG13ZJ, 0RG1470, 0RG1471, 0RG147J, 0RG14J0, 0RG14J1, 0RG14JJ, 0RG14K0, 0RG14K1, 0RG14KJ, 0RG14Z0, 0RG14Z1, 0RG14ZJ, 0RG4070, 0RG4071, 0RG407J, 0RG40J0, 0RG40J1, 0RG40JJ, 0RG40K0, 0RG40K1, 0RG40KJ, 0RG40Z0, 0RG40Z1, 0RG40ZJ, 0RG4370, 0RG4371, 0RG437J, 0RG43J0, 0RG43J1, 0RG43JJ, 0RG43K0, 0RG43K1, 0RG43KJ, 0RG43Z0, 0RG43Z1, 0RG43ZJ, 0RG4470, 0RG4471, 0RG447J, 0RG44J0, 0RG44J1, 0RG44JJ, 0RG44K0, 0RG44K1, 0RG44KJ, 0RG44Z0, 0RG44Z1, 0RG44ZJ, 0RG6070, 0RG6071, 0RG607J, 0RG60J0, 0RG60J1, 0RG60JJ, 0RG60K0, 0RG60K1, 0RG60KJ, 0RG60Z0, 0RG60Z1, 0RG60ZJ, 0RG6370, 0RG6371, 0RG637J, 0RG63J0, 0RG63J1, 0RG63JJ, 0RG63K0, 0RG63K1, 0RG63KJ, 0RG63Z0, 0RG63Z1, 0RG63ZJ, 0RG6470, 0RG6471, 0RG647J, 0RG64J0, 0RG64J1, 0RG64JJ, 0RG64K0, 0RG64K1, 0RG64KJ, 0RG64Z0, 0RG64Z1, 0RG64ZJ, 0RGA070, 0RGA071, 0RGA07J, 0RGA0J0, 0RGA0J1, 0RGA0JJ, 0RGA0K0, 0RGA0K1, 0RGA0KJ, 0RGA0Z0, 0RGA0Z1, 0RGA0ZJ, 0RGA370, 0RGA371, 0RGA37J, 0RGA3J0, 0RGA3J1, 0RGA3JJ, 0RGA3K0, 0RGA3K1, 0RGA3KJ, 0RGA3Z0, 0RGA3Z1, 0RGA3ZJ, 0RGA470, 0RGA471, 0RGA47J, 0RGA4J0, 0RGA4J1, 0RGA4JJ, 0RGA4K0, 0RGA4K1, 0RGA4KJ, 0RGA4Z0, 0RGA4Z1, 0RGA4ZJ, 0SG0070, 0SG0071, 0SG007J, 0SG00J0, 0SG00J1, 0SG00JJ, 0SG00K0, 0SG00K1, 0SG00KJ, 0SG00Z0, 0SG00Z1, 0SG00ZJ, 0SG0370, 0SG0371, 0SG037J, 0SG03J0, 0SG03J1, 0SG03JJ, 0SG03K0,	

#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs	ICD-10 procedure codes	ICD-10 diagnosis codes
							0SG03K1, 0SG03KJ, 0SG03Z0, 0SG03Z1, 0SG03ZJ, 0SG0470, 0SG0471, 0SG047J, 0SG04J0, 0SG04J1, 0SG04JJ, 0SG04K0, 0SG04K1, 0SG04KJ, 0SG04Z0, 0SG04Z1, 0SG04ZJ, 0SG3070, 0SG3071, 0SG307J, 0SG30J0, 0SG30J1, 0SG30JJ, 0SG30K0, 0SG30K1, 0SG30KJ, 0SG30Z0, 0SG30Z1, 0SG30ZJ, 0SG3370, 0SG3371, 0SG337J, 0SG33J0, 0SG33J1, 0SG33JJ, 0SG33K0, 0SG33K1, 0SG33KJ, 0SG33Z0, 0SG33Z1, 0SG33ZJ, 0SG3470, 0SG3471, 0SG347J, 0SG34J0, 0SG34J1, 0SG34JJ, 0SG34K0, 0SG34K1, 0SG34KJ, 0SG34Z0, 0SG34Z1, 0SG34ZJ, 0SG504Z, 0SG507Z, 0SG50JZ, 0SG50KZ, 0SG50ZZ, 0SG534Z, 0SG537Z, 0SG53JZ, 0SG53KZ, 0SG53ZZ, 0SG544Z, 0SG547Z, 0SG54JZ, 0SG54KZ, 0SG54ZZ, 0SG604Z, 0SG607Z, 0SG60JZ, 0SG60KZ, 0SG60ZZ, 0SG634Z, 0SG637Z, 0SG63JZ, 0SG63KZ, 0SG63ZZ, 0SG644Z, 0SG647Z, 0SG64JZ, 0SG64KZ, 0SG64ZZ, 0SG704Z, 0SG707Z, 0SG70JZ, 0SG70KZ, 0SG70ZZ, 0SG734Z, 0SG737Z, 0SG73JZ, 0SG73KZ, 0SG73ZZ, 0SG744Z, 0SG747Z, 0SG74JZ, 0SG74KZ, 0SG74ZZ, 0SG804Z, 0SG807Z, 0SG80JZ, 0SG80KZ, 0SG80ZZ, 0SG834Z, 0SG837Z, 0SG83JZ, 0SG83KZ, 0SG83ZZ, 0SG844Z, 0SG847Z, 0SG84JZ, 0SG84KZ, 0SG84ZZ, 0HTT0ZZ, 0HTU0ZZ, 0HTV0ZZ, 07T50ZZ, 07T60ZZ, 0HTT0ZZ, 0HTU0ZZ, 07T50ZZ, 07T60ZZ, 0HTV0ZZ, 07T50ZZ, 07T60ZZ, 0HTT0ZZ, 0HTU0ZZ, 0KTH0ZZ, 0KTJ0ZZ, 07T50ZZ, 07T60ZZ, 0HTV0ZZ, 0KTH0ZZ, 0KTJ0ZZ, 07T50ZZ, 07T60ZZ, 07T70ZZ, 07T70ZZ, 07T80ZZ, 07T90ZZ, 0HTT0ZZ, 0HTU0ZZ, 0KTH0ZZ, 0KTJ0ZZ, 07T50ZZ, 07T60ZZ, 07T70ZZ, 07T80ZZ, 07T90ZZ, 0HTV0ZZ, 0KTH0ZZ, 0KTJ0ZZ, 0H5T0ZZ, 0H5T3ZZ, 0H5T7ZZ, 0H5T8ZZ, 0H5TXZZ, 0H5U0ZZ, 0H5U3ZZ, 0H5U7ZZ, 0H5U8ZZ, 0H5UXZZ, 0H5V0ZZ, 0H5V3ZZ, 0H5V7ZZ, 0H5V8ZZ, 0H5VXZZ, 0HBT0ZZ, 0HBT3ZZ, 0HBT7ZZ, 0HBT8ZZ, 0HBTXZZ, 0HBU0ZZ, 0HBU3ZZ, 0HBU7ZZ, 0HBU8ZZ, 0HBUXZZ, 0HBV0ZZ, 0HBV3ZZ, 0HBV7ZZ, 0HBV8ZZ, 0HBVXZZ, 0HBT0ZZ, 0HBT3ZZ, 0HBU0ZZ, 0HBU3ZZ, 0HBV0ZZ, 0HBV3ZZ, 0HBT0ZZ, 0HBT3ZZ, 0HBU0ZZ, 0HBU3ZZ, 0HBV0ZZ, 0HBV3ZZ, 0HBY0ZZ, 0HBY3ZZ, 0HBY7ZZ, 0HBY8ZZ, 0HBYXZZ, 0HTY0ZZ, 0H5W0ZZ, 0H5W3ZZ, 0H5W7ZZ, 0H5W8ZZ, 0H5WXZZ, 0H5X0ZZ, 0H5X3ZZ, 0H5X7ZZ, 0H5X8ZZ, 0H5XXZZ, 0HBW0ZZ, 0HBW3ZZ, 0HBW7ZZ, 0HBW8ZZ, 0HBWXZZ, 0HBX0ZZ, 0HBX3ZZ, 0HBX7ZZ, 0HBX8ZZ, 0HBXXZZ, 0HTWXZZ, 0HTXXZZ	

#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs		ICD-10 procedure codes	ICD-10 diagnosis codes
19	Pulmonology medical	4	994	Med	CMS HAI index PNE Readmit HCAHPS	190, 191, 192, 193, 194, 195			<b>a</b> <b>n</b> <b>d</b> 2D=J1289, J189, J84111, J842, J84116, J84117
20	COPD (pulmonary disease)	4	37	Med	HCAHPS	190, 191, 192			
21	Pneumonia	4	118	Med	CMS HAI index PNE Readmit HCAHPS	193, 194, 195			<b>a</b> <b>n</b> <b>d</b> 2D=J1289, J189, J84111, J842, J84116, J84117
<b>Individual conditions</b>									
22	Abdominal hysterectomy	13	153	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	742, 743	<b>a</b> <b>n</b> <b>d</b>	PP=0UT94ZZ, 0UTC4ZZ	
23	Colon surgery	6	34	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	329, 330, 331	<b>a</b> <b>n</b> <b>d</b>	PP=0DBE0ZZ, 0DBE3ZZ, 0DBE4ZZ, 0DBE7ZZ, 0DBE8ZZ, 0DTE0ZZ, 0DTE4ZZ, 0DTE7ZZ, 0DTE8ZZ, 0DTF0ZZ, 0DTF4ZZ, 0DTF7ZZ, 0DTF8ZZ, 0DTG0ZZ, 0DTG4ZZ, 0DTG7ZZ, 0DTG8ZZ, 0DTH0ZZ, 0DTH4ZZ, 0DTH7ZZ, 0DTH8ZZ, 0DTK0ZZ, 0DTL0ZZ, 0DTL4ZZ, 0DTL7ZZ, 0DTL8ZZ, 0DTN0ZZ, 0DTN4ZZ, 0DTN7ZZ, 0DTN8ZZ, 0DTP0ZZ, 0DTP4ZZ	
24	Gall bladder removal, laparoscopic	7	66	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	417, 418, 419	<b>a</b> <b>n</b> <b>d</b>	PP=0FB44ZZ, 0FT44ZZ	
25	Bariatric surgery	10	200	Surg	CMS HAI index Hosp_Wide Readmit HCAHPS	326, 327, 328, 619, 620, 621	<b>a</b> <b>n</b> <b>d</b>	2P=0DV60CZ, 0DV60DZ, 0DV60ZZ, 0DV63CZ, 0DV63DZ, 0DV63ZZ, 0DV64CZ, 0DV64DZ, 0DV64ZZ, 0DV67DZ, 0DV67ZZ, 0DV68DZ, 0DV68ZZ, 0DP67DZ, 0DP68DZ, 0DP60CZ, 0DP60DZ, 0DW64CZ, 0DP64DZ, 0DH60DZ, 0DH63DZ, 0DH64DZ, 0DH67DZ, 0DH68DZ, 0DW60CZ, 0DW60DZ, 0DW63CZ, 0DW63DZ, 0DW64CZ, 0DW64DZ, 0DW67CZ, 0DW67DZ, 0DW68CZ, 0DW68DZ, 0DW6XCZ, 0DW6XDZ, 0D16074, 0D16079, 0D1607A, 0D1607B, 0D1607L, 0D160J4, 0D160J9, 0D160JA, 0D160JB, 0D160JL, 0D160K4, 0D160K9, 0D160KA, 0D160KB, 0D160KL, 0D160Z4, 0D160Z9, 0D160ZA, 0D160ZB, 0D160ZL, 0D163J4, 0D16474, 0D16479, 0D1647A, 0D1647B, 0D1647L, 0D164J4, 0D164J9, 0D164JA, 0D164JB, 0D164JL, 0D164K4, 0D164K9, 0D164KA, 0D164KB, 0D164KL, 0D164Z4, 0D164Z9, 0D164ZA, 0D164ZB, 0D164ZL, 0D16874, 0D16879, 0D1687A, 0D1687B, 0D1687L, 0D168J4, 0D168J9, 0D168JA, 0D168JB, 0D168JL, 0D168K4, 0D168K9, 0D168KA, 0D168KB, 0D168KL, 0D168Z4, 0D168Z9, 0D168ZA, 0D168ZB, 0D168ZL, 0D19079, 0D1907A, 0D1907B, 0D1907L, 0D190J4,	<b>a</b> <b>n</b> <b>d</b> 2D=E6601, E662, Z6835, Z6836, Z6837, Z6838, Z6839, Z6841, Z6842, Z6843, Z6844, Z6845

#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs	ICD-10 procedure codes	ICD-10 diagnosis codes
							0D190J9, 0D190JA, 0D190JB, 0D190JL, 0D190K4, 0D190K9, 0D190KA, 0D190KB, 0D190KL, 0D190Z4, 0D190Z9, 0D190ZA, 0D190ZB, 0D190ZL, 0D193J4, 0D19474, 0D19479, 0D1947A, 0D1947B, 0D1947L, 0D194J4, 0D194J9, 0D194JA, 0D194JB, 0D194JL, 0D194K4, 0D194K9, 0D194KA, 0D194KB, 0D194KL, 0D194Z4, 0D194Z9, 0D194ZA, 0D194ZB, 0D194ZL, 0D19874, 0D19879, 0D1987A, 0D1987B, 0D1987L, 0D198J4, 0D198J9, 0D198JA, 0D198JB, 0D198JL, 0D198K4, 0D198K9, 0D198KA, 0D198KB, 0D198KL, 0D198Z4, 0D198Z9, 0D198ZA, 0D198ZB, 0D198ZL, 0D1A074, 0D1A07A, 0D1A07B, 0D1A07H, 0D1A07K, 0D1A07L, 0D1A07M, 0D1A07N, 0D1A07P, 0D1A07Q, 0D1A0J4, 0D1A0JA, 0D1A0JB, 0D1A0JH, 0D1A0JK, 0D1A0JL, 0D1A0JM, 0D1A0JN, 0D1A0JP, 0D1A0JQ, 0D1A0K4, 0D1A0KA, 0D1A0KB, 0D1A0KH, 0D1A0KK, 0D1A0KL, 0D1A0KM, 0D1A0KN, 0D1A0KP, 0D1A0KQ, 0D1A0Z4, 0D1A0ZA, 0D1A0ZB, 0D1A0ZH, 0D1A0ZK, 0D1A0ZL, 0D1A0ZM, 0D1A0ZN, 0D1A0ZP, 0D1A0ZQ, 0D1A3J4, 0D1A474, 0D1A47A, 0D1A47B, 0D1A47H, 0D1A47K, 0D1A47L, 0D1A47M, 0D1A47N, 0D1A47P, 0D1A47Q, 0D1A4J4, 0D1A4JA, 0D1A4JB, 0D1A4JH, 0D1A4JK, 0D1A4JL, 0D1A4JM, 0D1A4JN, 0D1A4JP, 0D1A4JQ, 0D1A4K4, 0D1A4KA, 0D1A4KB, 0D1A4KH, 0D1A4KK, 0D1A4KL, 0D1A4KM, 0D1A4KN, 0D1A4KP, 0D1A4KQ, 0D1A4Z4, 0D1A4ZA, 0D1A4ZB, 0D1A4ZH, 0D1A4ZK, 0D1A4ZL, 0D1A4ZM, 0D1A4ZN, 0D1A4ZP, 0D1A4ZQ, 0D1A874, 0D1A87A, 0D1A87B, 0D1A87H, 0D1A87K, 0D1A87L, 0D1A87M, 0D1A87N, 0D1A87P, 0D1A87Q, 0D1A8J4, 0D1A8JA, 0D1A8JB, 0D1A8JH, 0D1A8JK, 0D1A8JL, 0D1A8JM, 0D1A8JN, 0D1A8JP, 0D1A8JQ, 0D1A8K4, 0D1A8KA, 0D1A8KB, 0D1A8KH, 0D1A8KK, 0D1A8KL, 0D1A8KM, 0D1A8KN, 0D1A8KP, 0D1A8KQ, 0D1A8Z4, 0D1A8ZA, 0D1A8ZB, 0D1A8ZH, 0D1A8ZK, 0D1A8ZL, 0D1A8ZM, 0D1A8ZN, 0D1A8ZP, 0D1A8ZQ, 0D1B074, 0D1B07B, 0D1B07H, 0D1B07K, 0D1B07L, 0D1B07M, 0D1B07N, 0D1B07P, 0D1B07Q, 0D1B0J4, 0D1B0JB, 0D1B0JH, 0D1B0JK, 0D1B0JL, 0D1B0JM, 0D1B0JN, 0D1B0JP, 0D1B0JQ, 0D1B0K4, 0D1B0KB, 0D1B0KH, 0D1B0KK, 0D1B0KL, 0D1B0KM, 0D1B0KN, 0D1B0KP, 0D1B0KQ, 0D1B0Z4, 0D1B0ZB, 0D1B0ZH, 0D1B0ZK, 0D1B0ZL, 0D1B0ZM, 0D1B0ZN, 0D1B0ZP, 0D1B0ZQ, 0D1B3J4, 0D1B474, 0D1B47B, 0D1B47H, 0D1B47K, 0D1B47L, 0D1B47M, 0D1B47N, 0D1B47P, 0D1B47Q, 0D1B4J4, 0D1B4JB, 0D1B4JH, 0D1B4JK, 0D1B4JL, 0D1B4JM, 0D1B4JN, 0D1B4JP, 0D1B4JQ, 0D1B4K4, 0D1B4KB, 0D1B4KH, 0D1B4KK, 0D1B4KL, 0D1B4KM, 0D1B4KN, 0D1B4KP, 0D1B4KQ,	



#	WebMD condition or category	MDC #	DX #	Med Surg	CMS index used	MS-DRGs	ICD-10 procedure codes	ICD-10 diagnosis codes
							0D1B4Z4, 0D1B4ZB, 0D1B4ZH, 0D1B4ZK, 0D1B4ZL, 0D1B4ZM, 0D1B4ZN, 0D1B4ZP, 0D1B4ZQ, 0D1B874, 0D1B87B, 0D1B87H, 0D1B87K, 0D1B87L, 0D1B87M, 0D1B87N, 0D1B87P, 0D1B87Q, 0D1B8J4, 0D1B8JB, 0D1B8JH, 0D1B8JK, 0D1B8JL, 0D1B8JM, 0D1B8JN, 0D1B8JP, 0D1B8JQ, 0D1B8K4, 0D1B8KB, 0D1B8KH, 0D1B8KK, 0D1B8KL, 0D1B8KM, 0D1B8KN, 0D1B8KP, 0D1B8KQ, 0D1B8Z4, 0D1B8ZB, 0D1B8ZH, 0D1B8ZK, 0D1B8ZL, 0D1B8ZM, 0D1B8ZN, 0D1B8ZP, 0D1B8ZQ	

### Appendix 3: Conditions and procedures with Cigna Hospital Quality Index component index weights

Condition or procedure description	Mortality weight	CMS HAI <sup>4</sup> weight	Complication weight	Leapfrog weight	CMS readmit weight <sup>5</sup>	Primary C-section delivery weight	CMS early delivery weight	CMS HCAHPS weight
Abdominal hysterectomy	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Angioplasty, with and without stent	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Cancer conditions	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Cardiac catheterization and angioplasty	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Cardiac catheterization	0.00	0.00	0.90	0.05	0.00	0.00	0.00	0.05
Cesarean section	0.00	0.10	0.60	0.05	0.00	0.00	0.20	0.05
Colon surgery	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
COPD	0.00	0.00	0.90	0.05	0.00	0.00	0.00	0.05
Coronary artery bypass surgery	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Deliveries	0.00	0.10	0.60	0.05	0.00	0.00	0.20	0.05
Disc surgery	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Gall bladder removal, laparoscopic	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Heart surgery	0.30	0.25	0.30	0.05	0.05	0.00	0.00	0.05
Heart valve replacement	0.30	0.25	0.30	0.05	0.05	0.00	0.00	0.05
Hip replacement	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Joint replacement	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Knee replacement	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Mastectomy, total or simple	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Orthopedic back surgery	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Pneumonia	0.60	0.15	0.00	0.05	0.15	0.00	0.00	0.05
Prostatectomy, radical	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Pulmonology medical	0.60	0.15	0.00	0.05	0.15	0.00	0.00	0.05
Spinal fusion	0.00	0.25	0.60	0.05	0.05	0.00	0.00	0.05
Vaginal delivery	0.00	0.00	0.55	0.05	0.00	0.15	0.20	0.05

<sup>4</sup> Healthcare-associated infection

<sup>5</sup> CMS readmit weight includes weights for the specific 30-day readmission measures for pneumonia and pulmonology medical. These weights are 0.15. It also includes weights for the hospital wide 30-day readmission measure for conditions other than pneumonia and pulmonology medical. These weights are 0.05.

Together, all the way.™



All Cigna products and services are provided exclusively by or through operating subsidiaries of Cigna Corporation, including Cigna Health and Life Insurance Company, Connecticut General Life Insurance Company, Cigna Behavioral Health, Inc., and HMO or service company subsidiaries of Cigna Health Corporation. The Cigna name, logo, and other Cigna marks are owned by Cigna Intellectual Property, Inc.