



# Guide to the 2021 orthopedic specialist hip/knee Aetna Smart Compare™ designation

Aetna is one of the oldest and largest national insurers. That experience gives us a unique opportunity to help transform health care. We believe that a better care system is more transparent and consumer-focused, and it recognizes physicians for their clinical quality and effective use of health care resources.

We are developing provider designations to support reaching this vision.

## 1. Orthopedic specialist hip/knee Aetna Smart Compare designation purpose and intended use

The orthopedic specialist hip/knee designation identifies practices participating in an Aetna commercial plan that deliver high-quality effective care to their patients for hip and knee conditions based on recognized industry measures. This hip/knee designation will give our members more information to help them choose an orthopedic practice for themselves and their families.

The orthopedic specialist hip/knee designations are given to practices based on their **effectiveness** and **clinical quality** performance.

Aetna members will see these designations when they use our **digital search tools**:

- Our members will be able to see **up to two summary designations** next to a physician's name – one for effectiveness and the other for clinical quality. Effectiveness and clinical quality are separate categories.
- We base designations on the orthopedic practice, or practices, that a specialist is associated with.
- We will only display positive outcomes (that is, situations where an orthopedic practice earned a summary designation).

We'll also use the designations to identify options for members who may need a provider recommendation through **other channels, like a member call center**:

- We give at least three orthopedic provider options each time a member asks for a specialist.
- We give priority to practices with summary designations.
- We refer members to our digital search tools for a full provider directory.

The orthopedic specialist hip/knee designation is one factor that may help members choose a physician through Aetna digital tools and other channels. It should not be the sole basis for their selection. They may consider other factors like provider location and consumer ratings.

The orthopedic specialist hip/knee designation has **no bearing on provider contracts, reimbursement or a member's benefit level.**

## **2. Orthopedic specialist hip/knee Aetna Smart Compare™ designation measures**

The orthopedic specialist hip/knee designation is organized around two categories of measures:

- **Effectiveness**, which measures the outcomes and efficiency of treatment decisions.
- **Clinical quality**, which measures the quality of facilities where orthopedic specialists perform hip and/or knee replacement procedures. This measure is affected by complication rates and compliance with clinical guidelines.

We measure these categories separately.

### **2.1 Effectiveness**

The effectiveness category measures the outcomes of care decisions through **13 Episode Treatment Group®** (ETG) codes addressing the diagnosis and treatment of joint degeneration and joint derangement conditions. ETGs are defined using Optum Symmetry® Episode Treatment Group® software version 9.4.

Episodes of care are groupings of claims associated with the treatment of health conditions. An episode of care spans from the onset of symptoms until treatment is complete. It includes physician visits, diagnostic services, pharmacy claims, emergency room visits, inpatient admissions and other associated services. Practice performance in this category is affected by:

- Decisions on whether to prescribe a service, what type of service is prescribed and where it is rendered
- Ability to prevent complications (for example, emergency room visits due to uncontrolled pain).

There are two sub-categories of joint degeneration/joint derangement episodes — **hip, knee**. ETG codes included in the analysis had a minimum volume of 200 Aetna episodes by body part (hip, knee). The list of ETG codes used for the assessment is in Appendix 1.

### **2.2 Clinical quality**

The clinical quality category looks at the quality of **facilities where orthopedic specialists perform hip or knee replacement procedures**. Complication rates and compliance with clinical guidelines affect this measure.

The clinical quality designation is awarded based on publicly available external data on facilities where the orthopedic practice performs hip or knee procedures:

- **Two measures from CMS Hospital Compare:**
  - 30-day readmission rate following elective hip or knee arthroplasty
  - Hospital risk adjusted complication rate following elective hip or knee arthroplasty.



- **Joint Commission Advanced Total Hip and Knee Replacement Certification**, which is available to hospitals, critical access hospitals and ambulatory surgical centers. The Joint Commission Certification is based on outcomes that include surgical site infections, fall rates, improvement in patient education prior to discharge, length of stay, early ambulation and pain management. To be eligible for the certification, a facility must have served a minimum of 10 patients.

We look at Aetna case volume to link orthopedic practices to facilities. If an orthopedic practice performs cases at more than one facility, we use a weighted average score based on our case volume.

### **3. Orthopedic practices in scope**

We measure orthopedic specialists at the **practice level**. We identify practices by using their tax identification number from Aetna claims billing.

Orthopedic practices are physician groups with at least one physician credentialed and practicing under the “orthopedics” specialty.

### **4. Minimum sample size**

We only measure orthopedic practices with **at least three complete non-outlier episodes of care** across commercial and Medicare between January 1, 2018, and December 31, 2019. The purpose of setting a low threshold is to be as inclusive as possible, while excluding orthopedic practices with no Aetna experience in treating hip or knee replacement conditions.

We look at effectiveness for hip and knee conditions separately, due to differences in clinical needs. We measure clinical quality across conditions since it is based on external data not available at a more detailed level.

### **5. Methodology to award designations**

An orthopedic practice may earn **up to two summary designations** — one for **effectiveness** and one for **clinical quality**. Summary designations will be displayed through our digital tools.

**Summary effectiveness designations are awarded by aggregating detailed effectiveness designations**, assigned based on the type of joint condition (that is, hip or knee).

Table 1 shows the hierarchy between summary and detailed designations.

Table 1 – Full list of designations awards possible for an orthopedic practice

Commercial	
<b>Summary</b>	<b>Detailed</b>
Effectiveness	Hip episodes of care
	Knee episodes of care
Clinical quality	

- Detailed effectiveness designations for hip and knee are aggregated into a summary effectiveness designation.
- Summary clinical quality designation is measured based on CMS Hospital Compare and Joint Commission Certification for the facilities associated with the provider.

### 5.1 How an orthopedic practice can earn effectiveness designations

We base **detailed effectiveness designations** on the performance of an orthopedic practice relative to a risk- and market-adjusted benchmark. There are three possible outcomes for each designation:

- **“Designation earned”**: orthopedic practice performance is better than a risk-and market-adjusted benchmark in a way that is statistically significant.
- **“Criteria not met”**: orthopedic practice performance is worse than a risk-and market-adjusted benchmark in a way that is statistically significant.
- **“Insufficient information”**: orthopedic practice does not have sufficient data to be scored, or performance is not significantly different from a risk and market-adjusted benchmark.

Refer to Section 6 for the logic for calculation of benchmarks.

**Summary effectiveness** designations are awarded using a **scoring system**:

- Each detailed “designation earned” outcome is worth 1 point.
- Each detailed “criteria not met” outcome is worth -1 point.
- Each detailed “insufficient information” outcome is worth 0 points.

Summary designations are awarded based on the sum of points:

- “Designation earned” if the sum is 1 or higher.
- “Criteria not met” if the sum is negative.
- “Insufficient information” if the sum is zero.

Table 2 provides an example to illustrate this logic.

Table 2 – Example of logic to determine whether an orthopedic practice earned effectiveness summary designations for commercial

Summary			Detailed		
Category	Results	Points	Sub-category	Results	Points
Effectiveness	Insufficient information	0	Hip episodes of care	Designation earned	1
			Knee episodes of care	Criteria not met	-1

Summary “designation earned” results will be displayed through Aetna digital search tools. Summary “criteria not met” and “insufficient information” results will not be displayed through our digital search tools. Detailed results will be used to explain why an orthopedic practice earned a summary designation.



## 5.2 How an orthopedic practice can earn a clinical quality designation

The two clinical quality measures described in Section 2 (i.e., CMS Hospital Compare and Joint Commission Certification) are evaluated separately. Results are combined into an overall summary clinical quality designation.

### 5.2.1 CMS Hospital Compare

The CMS Hospital Compare category has three possible outcomes:

- **Positive performance** if practice performance is better than a risk-adjusted benchmark minus 0.5 standard deviations for at least one of the two measures (that is, 30-day readmissions, complications)
- **Negative performance** if practice performance is worse than a risk-adjusted benchmark plus 0.5 standard deviations for both measures (that is, 30-day readmissions, complications)
- **Neutral performance** otherwise.

### 5.2.2 Joint Commission Advanced Total Hip and Knee Replacement Certification

The Joint Commission Certification category has two possible outcomes:

- **Positive performance** if the orthopedic practice performed more than 25 percent of its hip/knee procedures at Joint Commission Certified facilities. Facility certification is based on July 2020 data. Volume threshold is based on 2019 Aetna data across commercial and Medicare.
- **Neutral performance** otherwise.

### 5.2.3 Clinical quality designation

The two categories (that is, CMS Hospital Compare and Joint Commission Certification), are aggregated into a clinical quality designation using the following rules:

- **“Designation earned”**: orthopedic practice has “positive performance” on CMS Hospital Compare measures *or* Joint Commission Certification
- **“Criteria not met”**: orthopedic practice has “negative performance” on CMS Hospital Compare measures *and* “neutral performance” for Joint Commission Certification
- **“Insufficient information”**: orthopedic practice has “neutral performance” on CMS Hospital Compare measures *and* “neutral performance” for Joint Commission Certification.

Table 3 illustrates this logic. We use CMS Hospital Compare data as of July 2020.

To be eligible for a clinical quality designation, an orthopedic practice must have:

- Majority of their 2019 surgery spend at facilities are in-network with Aetna, and
- No 2019 cases at a facility with confirmed fraud cases.

Orthopedic practices that do not meet both criteria cannot earn a clinical quality designation. These practices receive an “insufficient information” designation for clinical quality.

Table 3 – Logic to determine whether an orthopedic practice earned a clinical quality designation

		CMS Hospital Compare		
		Positive performance	Neutral performance	Negative performance
Joint Commission Certification	Positive performance	Designation earned	Designation earned	Designation earned
	Neutral performance	Designation earned	Insufficient information	Criteria not met

## 6. Methodology to determine orthopedic practice performance and benchmark

### 6.1 Effectiveness: episodes of care

The orthopedic specialist hip/knee designation measures orthopedic practices based on **episodes of care for hip or knee conditions they treat**. These are defined as episodes where they are the responsible provider. A responsible provider is defined as:

- If a surgery is present, the provider who performed the surgery. If there are multiple surgeries, the responsible provider is the one with the majority of professional claim spend within the episode.
- If no surgery is present, the provider with the majority of professional visit volume within an episode.

Only complete episodes, with start and end date between January 1, 2018, and December 31, 2019, are part of the analysis. We exclude outlier episodes. We use Aetna commercial claims for this analysis.

We calculate a **benchmark** episode allowed amount for each episode using a **decision tree machine learning model**. Model features include Optum Symmetry® Episode Risk Groups™ (ERG) retrospective risk score, concurrent episodes, member comorbidities, Social Determinants of Health. Model R-Squared is 0.85 excluding outliers.

An **orthopedic practice-level performance index** is calculated as *total actual allowed amount/total benchmark allowed amount/market and risk-level performance index* for non-outlier episodes that the orthopedic practice is responsible for. The market and risk-level performance index is calculated as *total actual episode allowed/ total benchmark episode allowed* for each combination of:

- Hospital Referral Region (HRR)
- Body part (hip, knee)
- Practice risk tier (low if practice average risk score is ≤median, high otherwise).

Dividing by a market and risk-level performance index normalizes the score, so that orthopedic practices that perform in line with the benchmark have a performance index of 1.



The orthopedic practice-level performance index is **compared to 1**. A statistical test (.10 significance level) is run to identify orthopedic practices that are different from 1 in a way that is statistically significant to award detailed designations. **More than 10 valid non-outlier commercial episodes for a condition type** (for example, commercial hip episodes of care) are required to be eligible for a designation for that condition type. Practices with insufficient volume receive an “insufficient information” designation.

## 6.2 Clinical quality

### 6.2.1 Orthopedic practices are linked to facilities using Aetna claims data

Orthopedic practices are linked to facilities where they performed at least one hip or knee replacement procedure in 2019, across commercial and Medicare lines of business. If an orthopedic practice performs cases at more than one facility, we use a weighted average score based on Aetna case count to determine practice-level performance.

Once orthopedic practices are linked to facilities, we leverage external data sources to assess practice-level performance. Practice-level performance is assigned for each of the two data sources independently (i.e., CMS Hospital Compare and Joint Commission Certification). Results are then aggregated into an overall score for associated facility quality as described in Section 5.

### 6.2.2 CMS Hospital Compare

CMS Hospital Compare provides actual facility performance and expected facility performance for both quality measures (that is, 30-day readmission rate and hospital complication rate following an elective hip or knee arthroplasty).

**An index is calculated as ratio between actual and expected facility performance for each measure.**

Measures are scored independently, with the following potential outcomes:

- **Positive performance** if practice performance is lower than index average minus 0.5 standard deviations
- **Negative performance** if practice performance is higher than index average plus 0.5 standard deviations
- **Neutral performance** otherwise.

Scores are combined into a **CMS Hospital compare score** by selecting the result that is most favorable to the practice, as shown in Table 4:

- **Positive performance** if practice earned a “positive performance” score on either measure (that is, 30-day readmission rate *or* complication rate)
- **Negative performance** if practice earned a “negative performance” score on both measures (that is, 30-day readmission rate *and* complication rate)
- **Neutral performance** otherwise.

Table 4 – Logic to combined measure-level scores into an overall CMS Hospital Compare score

		<i>Hospital risk adjusted complication rate following elective hip or knee arthroplasty</i>		
		<i>Positive performance</i>	<i>Neutral performance</i>	<i>Negative performance</i>
<i>30-day readmission following elective hip or knee arthroplasty</i>	<i>Positive performance</i>	Positive performance	Positive performance	Positive performance
	<i>Neutral performance</i>	Positive performance	Neutral performance	Neutral performance
	<i>Negative performance</i>	Positive performance	Neutral performance	Negative performance

## 7. Frequency of refresh

We update the orthopedic specialist hip/knee designation once a year, using the most recent complete data. For example, results in this letter are based on Aetna claims experience through December 2019. This methodology is valid for 2021.





## Appendix 1 - Episode Treatment Group® (ETG) codes

ETG code	ETG description	Commercial
712202000	Joint degeneration, localized - knee & L leg, w/o complication, w/o comorbidity, w/o surgery	Knee
712202001	Joint degeneration, localized - knee & L leg, w/o complication, w/o comorbidity, with surgery	Knee
712202010	Joint degeneration, localized - knee & L leg, w/o complication, with comorbidity, w/o surgery	Knee
712202011	Joint degeneration, localized - knee & L leg, w/o complication, with comorbidity, with surgery	Knee
712202100	Joint degeneration, localized - knee & L leg, with complication, w/o comorbidity, w/o surgery	Knee
712202101	Joint degeneration, localized - knee & L leg, with complication, w/o comorbidity, with surgery	Knee
712202110	Joint degeneration, localized - knee & L leg, with complication, with comorbidity, w/o surgery	Knee
712202111	Joint degeneration, localized - knee & L leg, with complication, with comorbidity, with surgery	Knee
712203001	Joint degeneration, localized - thigh, hip & pelvis, w/o complication, w/o comorbidity, with surgery	Hip
712203010	Joint degeneration, localized - thigh, hip & pelvis, w/o complication, with comorbidity, w/o surgery	Hip
712203011	Joint degeneration, localized - thigh, hip & pelvis, w/o complication, with comorbidity, with surgery	Hip
714303000	Joint derangement - thigh, hip & pelvis, w/o surgery	Hip
714303001	Joint derangement - thigh, hip & pelvis, with surgery	Hip

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