Guide to the 2021 primary care physician 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. Primary care physician (PCP) Aetna Smart Compare designation purpose and intended use

The PCP designation identifies family practice, internal medicine and pediatric practices, participating in an Aetna commercial plan, that provide high-quality effective care to pediatric and adult patients based on recognized industry measures. This PCP designation will give our members more information to help them choose a primary care practice for themselves and their families.

The PCP designations are given to primary care 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 one for clinical quality. Effectiveness and clinical quality are separate categories.
- We base designations on the primary care practice, or practices, that a PCP is associated with.
- We will only display positive outcomes (that is, situations where a primary care practice earned a summary designation).

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

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

The PCP 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 PCP designation has **no bearing on provider contracts, reimbursement or a member's benefit level.**

2. PCP Aetna Smart Compare™ designation measures

The PCP designation is organized around two categories of measures:

- **Effectiveness**, which measures the outcomes and efficiency of treatment decisions.
- **Clinical quality**, which measures compliance with clinical guidelines.

We measure these categories separately.

2.1 Effectiveness

The effectiveness category measures the outcomes of care decisions through:

1) **Episodes of care — 108 Episode Treatment Group® (ETG) conditions** that are representative of cases that a PCP would typically treat
2) **Risk-adjusted utilization measures — three risk-adjusted measures**.

1) Episodes of care

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 diabetes).

The effectiveness episode of care measurement is based on **108 ETG conditions** that a PCP typically manages, defined using Optum Symmetry® Episode Treatment Group® software version 9.4. Conditions are divided into **two sub-categories based on clinical considerations:**

a) **Chronic episodes** are for conditions that require more support, collaboration and coordination from PCP over time (for example, diabetes).
b) **Non-chronic episodes** are for conditions associated with preventative care (for example, a routine visit) or short acute events typically seen in a healthy population (for example, acute bronchitis).

The list of ETG conditions used for the assessment is in Appendix 1 and Appendix 2.

2) Risk-adjusted utilization measures

Risk-adjusted utilization measures assess the effective consumption of health care resources, as well as outcomes associated with population management. Practice performance in this category is affected by:

- Decisions to prescribe specific services (for example, MRI, CT scan)
- Population management outcomes (emergency room visits, inpatient admissions).

Primary care practices are evaluated on **three risk-adjusted utilization measures**:

- Inpatient admissions/1,000 members
- ER visits/1,000 members
- CT scan and MRI services/1,000 members.

Performance is risk-adjusted based on Optum Symmetry® Episode Risk Groups™ **(ERG)** retrospective risk score.

2.2 Clinical quality

The clinical quality category measures the outcome of treatment decisions through **21 HEDIS® measures** that a PCP typically influences (for example, HbA1c poor control >9.0%, cancer screening). Measures are divided into **two sub-categories based on clinical considerations:**

a) **Chronic measures**, associated with effective management of chronic conditions (for example, HbA1c poor control >9.0%)
b) **Non-chronic measures**, associated with preventative care (for example, breast cancer screening) or management of short acute events (for example, appropriate treatment for upper respiratory infection).

Measures are coded using HEDIS® specifications to align with use of industry accepted standards of measurement. The list of clinical quality measures used for the assessment is included in Appendix 3.

3. Primary care practices in scope

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

Primary care practices are physician groups that include at least one physician credentialed and practicing as one of the following specialties: **family practice, internal medicine or pediatrics. Nurse practitioners and physician assistants** are included only if one of the three specialties listed above is present within the same practice.

4. Minimum sample size

The PCP designation measures performance **separately for two "patient populations"** defined by age group: commercial adults and commercial pediatrics.

- Patients less than 18 years of age are considered pediatrics, and patients 18 years of age and older are considered adults.
- Patient populations are measured separately and are never combined, because they have different clinical needs.

Only primary care practices with **at least 25 attributed "valid members" for a patient population throughout 2019** are eligible to receive designations for that patient population.

- Valid members are members attributed to a primary care practice at the end of 2019, and not attributed to any other practices during calendar year 2019. They also have at least six months of medical benefit eligibility in calendar year 2019.
- Attribution methodology is based on our standard attribution logic, which considers both volume and recency of claims. Members can be attributed to nurse practitioners and physician assistants that are part of primary care practices.

5. Methodology to award designations

A primary care practice may earn **up to two summary designations** for each patient population — **one for effectiveness and one for clinical quality**. Summary designations will be displayed through our digital tools.

Summary designations are awarded by aggregating detailed designations. A primary care practice is awarded detailed designations based on their performance on sub-categories of measures that reflect different patients' clinical needs (as defined in Section 2):

- **Effectiveness** — A summary designation for effectiveness is the aggregation of three detailed designations: one for chronic episodes of care, one for non-chronic episodes of care and one for risk-adjusted utilization.
- **Clinical quality** — A summary designation for clinical quality is the aggregation of two detailed designations: one for chronic quality and one for non-chronic quality.

Table 1 illustrates the hierarchy between summary and detailed designations.

Table 1 – Full list of designation awards possible for a primary care practice

Commercial adults

Summary	Detailed
Effectiveness	Chronic episodes of care
	Non-chronic episodes of care
	Risk-adjusted utilization
Clinical quality	Chronic quality
	Non-chronic quality

- Detailed designations are aggregated into summary designations within each category of measures (effectiveness, clinical quality).
- Only summary designations will be displayed through our digital search tools.

Commercial pediatrics

Summary	Detailed
Effectiveness	Episodes of care
	Risk-adjusted utilization
Clinical quality	

- Pediatric members have a lower prevalence of chronic conditions therefore measures are not divided into chronic and non-chronic sub-categories.

Since patient populations are measured separately, the hierarchy applies within each patient population. Each Aetna member will only have two summary designations through our digital tools, because an individual member can only belong to one patient population.

Due to the limited prevalence of chronic conditions for pediatric patients, pediatric population episodes of care and clinical quality are measured without distinguishing between chronic and non-chronic clinical needs.

5.1 How a primary care practice can earn detailed designations

We based detailed designations on the performance of a primary care practice relative to a risk- and market-adjusted benchmark. There are three possible outcomes for each designation:

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

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

5.2 How a primary care practice can earn summary designations

Summary 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.

Points are **summed for each measure category** (effectiveness, clinical quality). 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. Please note that, like the rest of this methodology, the sum is performed within each "patient population."

Table 2 – Example of logic to determine whether a primary care practice earned effectiveness and clinical quality summary designations for commercial adults

Summary			**Detailed**		
Category	Results	Points	Sub-category	Results	Points
Effectiveness	Insufficient information	0	Chronic episodes of care	Designation earned	1
			Non-chronic episodes of care	Insufficient information	0
			Risk-adjusted utilization	Criteria not met	-1
Clinical quality	Designation earned	1	Chronic quality	Designation earned	1
			Non-chronic quality	Insufficient information	0

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 a primary care practice earned a summary designation.

6. Methodology to determine primary care practice performance and benchmark

6.1 Effectiveness: episodes of care

The PCP designation measures primary care practices based on **episodes of care for conditions they usually treat.** This is defined as episodes where they are the responsible provider (that is, they have the majority of professional claims in the episodes), or episodes where a primary care practice is involved in the delivery of care for the member.

Only episodes where a primary care practice is **involved before 10% of the episode cost is incurred** are used to measure provider performance. When multiple primary care practices are involved, the episode goes to the primary care practice that is involved first.

Only complete episodes, with start and end date between January 1, 2018, and December 31, 2019, are included. 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 and Social Determinants of Health. Model R-Squared is 0.70–0.79 excluding outliers.

A **primary care 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 primary care 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)
- Population (commercial adults, commercial pediatrics)
- Practice risk tier (low if practice average risk score is ≤median, high otherwise)
- Condition type for adult members (chronic, non-chronic).

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

The primary care practice-level performance index is **compared to 1**. A statistical test (.10 significance level) is run to identify primary care practices who are different from 1 in a way that is statistically significant to award detailed designations. **At least 20 valid non-outlier episodes for a population and condition type** (for example, commercial adults, chronic episodes of care) are required to be eligible for a designation for that population and

condition type. Practices with insufficient volume receive an "insufficient information" designation.

6.2 Effectiveness: risk-adjusted utilization measures

The PCP designation measures primary care practices based on the **utilization of valid members attributed to the practice**. Practice-level performance is calculated as count of events/attributed members/risk score.

An **empirical Bayesian transformation** is applied to each measure, to account for primary care practice volume and measure variance:

- The empirical Bayesian transformation assumes that practices have average performance and looks for information to pull them away from the average. Table 3 shows an example of how the Bayesian adjustment works. Practices with smaller sample size and/or higher variance are adjusted closer to the average.
- Parameters for the empirical Bayesian transformation are defined as national average and variance for each combination of measure (for example, inpatient admissions/1,000 attributed members), population (for example, commercial adults), practice size (small vs. large), practice risk tier (low vs. high) and geography type (urban vs. non-urban).

Table 3 – Example of Bayesian transformation for risk adjusted inpatient admissions/1,000 attributed members, commercial adults. TIN = Tax ID number = primary care practice. High-risk tier practices only

		National benchmark		**Primary care practice performance**			
TIN (size tier)	**Attributed members**	**National average**	**National variance**	**Practice performance**	**Practice variance**	**Practice performance after Bayesian adjustment**	**Bayesian adjustment**
TIN 1 (small)	47	31.6	430.5	56.8	460.9	43.8	-13.0
TIN 2 (small)	82	31.6	430.5	16.4	89.2	19.0	2.6
TIN 3 (large)	920	33.0	97.1	21.7	12.4	23.0	1.3

Benchmark utilization is calculated for each measure as the average utilization of a peer group, defined as combination of:

- Measure (for example, inpatient admissions/1,000 attributed members)
- Population (for example, commercial adults)
- Practice size (small if ≤110 attributed members for adults or ≤75 attributed members for pediatrics, large otherwise)
- Practice risk tier (low if practice average risk score is ≤median, high otherwise)
- Geography type (urban vs. non-urban).

A **measure-level index** is calculated as *measure value post-Bayesian transformation/ relevant benchmark*. For example, a small primary care practice located in an urban area and seeing high-risk members will be measured based on the small/high risk/urban peer group.

A **primary care practice-level index** is calculated as weighted average of measure-level indices using the weights in table 4, defined based on measure contribution to medical spend.

Table 4 – Effectiveness: list of risk-adjusted utilization measures

		Patient population	
	Weight	Commercial adults	Commercial pediatrics
Inpatient admissions/1,000 attributed members	3	✓	✓
ER visits/1,000 attributed members	2	✓	✓
MRI and CT scans/1,000 attributed members	1	✓	✓

The primary care practice-level performance index is **compared to 1**. A statistical test (0.05 significance level) is run to identify primary care practices who are different from 1 in a way that is statistically significant to award detailed designations. **More than 75 attributed members are required to be eligible for a designation for the commercial pediatrics population**, due to lower overall utilization.

6.3 Clinical quality

The PCP designation measures primary care practices based on **quality performance on valid members attributed to the practice**. Performance is measured based on data for the HEDIS® measurement period ending December 31, 2019.

Only measures where a practice has **at least five "valid members" in the denominator** for a patient population are considered valid measures and are included in the assessment. Low thresholds were set so that as many providers as possible are eligible to receive a designation.

An **empirical Bayesian transformation** is applied to each measure to account for primary care practice volume and measure variance. Approach is consistent to what described in Section 6.2.

Benchmark utilization is calculated for each measure as the average utilization of a peer group, defined as combination of:

- Measure (for example, breast cancer screening)
- Population (for example, commercial adults)
- Practice size (small if ≤110 attributed members for adults or ≤75 attributed members for pediatrics, large otherwise)

- Practice risk tier (low if practice average risk score is ≤median, high otherwise)
- Geography type (urban vs. non-urban)

A **measure-level index** is calculated as *measure value post-Bayesian transformation/ relevant benchmark*. For example, a small primary care practice located in an urban area and seeing high risk members will be measured based on the small/high risk/urban peer group.

Measure-level indices are normalized to account for differences in average value and standard deviation across measures:
- A normalized index is calculated for each measure as *(index post-Bayesian adjustment – peer group mean)/peer group standard deviation*.
- After the normalization, all measures-level indices have an average value of zero and a standard deviation of one.

A **primary care practice-level index** is calculated as the average of normalized measure-level indices. The normalization process described above reduces the likelihood that measures with higher standard deviation have a disproportionate impact on the index of a primary care practice.

The primary care practice-level performance index is **compared to zero**. A statistical test (0.10 significance level) is run to identify primary care practices that are different from zero in a way that is statistically significant to award detailed designations.

Primary care practices need to have **at least two valid measures** to be eligible for a designation for commercial adults, and **three valid measures** to be eligible for a designation for commercial pediatrics. Practices that do not meet these criteria receive an "insufficient information" designation.

7. Frequency of refresh

We update the PCP 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) conditions: Commercial adults

Non-chronic	Chronic	
1. Acute bronchitis	1. AIDS	44. Other inflammation of intestines & abdomen
2. Acute pancreatitis	2. Alcohol dependence	45. Other inflammatory lung diseases
3. Acute sinusitis	3. Alzheimer's disease	46. Other metabolic disorders
4. Allergic rhinitis	4. Anxiety disorder or phobias	47. Parkinson's disease
5. Bacterial infection of skin	5. Asthma	48. Psychosexual disorder
6. Bacterial lung infections	6. Atrial fibrillation & flutter	49. Psychotic & schizophrenic disorders
7. Burns	7. Attention deficit disorder	50. Pulmonary heart disease
8. Conditional exam	8. Autism & child psychoses	51. Severe ventricular rhythms
9. Contact dermatitis	9. Brain trauma	52. Valvular disorder
10. Dermatological signs & symptoms	10. Cerebral vascular accident	
11. Embolism & thrombosis of veins	11. Chronic obstructive pulmonary disease	
12. Gastritis &/or duodenitis	12. Chronic pancreatitis	
13. Gout	13. Chronic renal failure	
14. Hepatology diseases signs & symptoms	14. Chronic sinusitis	
15. Hyper-functioning thyroid gland	15. Cirrhosis	
16. Infection of upper genitourinary system	16. Congestive heart failure	
17. Infections of oral cavity	17. Dementia	
18. Infectious diseases signs & symptoms	18. Development disorder	
19. Inflammation of esophagus	19. Diabetes	
20. Inflammation of oral cavity	20. Eating disorder	
21. Non-routine inoculation	21. Endocrine disease signs & symptoms	
22. Non-toxic goiter	22. Heart failure, diastolic	
23. Nutritional deficiency	23. Hered & deg diseases of central nervous system, oth	
24. Other diseases of thyroid gland	24. Hyper-functioning parathyroid gland	
25. Other infections of ear/nose/throat	25. Hyperlipidemia, other	
26. Other infectious diseases	26. Hypertension	
27. Other infectious diseases of intestines & abdomen	27. Hypo-functioning adrenal gland	
28. Otitis media	28. Hypo-functioning thyroid gland	
29. Otolaryngology diseases signs & symptoms	29. Infectious hepatitis	
30. Parasitic skin infection	30. Iron deficiency anemia	
31. Phlebitis & thrombophlebitis of veins	31. Ischemic heart disease	
32. Pulmonary embolism	32. Lupus	
33. Pulmonology diseases signs & symptoms	33. Male sex gland disorders	
34. Septicemia	34. Mood disorder, bipolar	
35. Tonsillitis, adenoiditis or pharyngitis	35. Mood disorder, depressed	
36. Ulcer	36. Non-infectious hepatitis	
37. Viral pneumonia	37. Obesity	
38. Routine exam	38. Occupational & environmental pulmonary diseases	
	39. Opioid or barbiturate dependence	
	40. Osteoporosis	
	41. Other conduction disorders	
	42. Other drug dependence	
	43. Other hematologic diseases	

Appendix 2 - Episode Treatment Group® (ETG) conditions: Commercial pediatrics

1. Acute bronchitis	31. Other inflammation of intestines & abdomen
2. Acute sinusitis	32. Other metabolic disorders
3. Allergic rhinitis	33. Otitis media
4. Anxiety disorder or phobias	34. Otolaryngology diseases signs & symptoms
5. Asthma	35. Parasitic skin infection
6. Attention deficit disorder	36. Pulmonology diseases signs & symptoms
7. Autism & child psychoses	37. Tonsillitis, adenoiditis or pharyngitis
8. Bacterial infection of skin	38. Viral pneumonia
9. Bacterial lung infections	39. Fungal skin infection
10. Burns	40. Conditions associated with menstruation
11. Chronic sinusitis	41. Infection of vagina except monilial
12. Conditional exam	42. Other inflammation of skin
13. Contact dermatitis	43. Monilial infection of vagina (yeast)
14. Development disorder	44. Exposure to infectious diseases
15. Diabetes	45. Other diseases of intestines & abdomen
16. Eating disorder	46. Other disorders of ear/nose/throat
17. Gastritis &/or duodenitis	47. Inflammation of rectum or anus
18. Hered & deg diseases of central nervous system, oth	48. Viral skin infection
19. Hyperlipidemia, other	49. Migraine headache
20. Hypo-functioning thyroid gland	50. Poisonings & toxic effects of drugs
21. Inflammation of esophagus	51. Irritable bowel syndrome
22. Iron deficiency anemia	52. Major joint inflammation - foot & ankle
23. Mood disorder, bipolar	53. Hernias, except hiatal
24. Mood disorder, depressed	54. Conjunctivitis
25. Non-routine inoculation	55. Other inflammatory conditions of ear/nose/throat
26. Nutritional deficiency	56. Infection of lower genitourinary system, not sexually transmitted
27. Obesity	
28. Other infections of ear/nose/throat	57. Routine exam
29. Other infectious diseases	
30. Other infectious diseases of intestines & abdomen	

Appendix 3 – Clinical quality measures

Commercial adults		Commercial pediatrics
Non-chronic	Chronic	
5 measures	9 measures	7 measures
1. Breast Cancer Screening 2. Cervical Cancer Screening 3. Colorectal Cancer Screening 4. Adult BMI Assessment 5. Appropriate Treatment for Upper Respiratory Infection	1. Hemoglobin A1c (HbA1c) testing 2. HbA1c poor control (>9.0%) 3. Eye exam (retinal) performed 4. Medical attention for nephropathy 5. Medication Reconciliation 6. Functional Status Assessment 7. Use of High-Risk Medications in Older Adults 8. Diabetes: Received Statin Therapy 9. Diabetes: Statin Adherence 80%	1. Appropriate Testing for Pharyngitis 2. Appropriate Treatment for Upper Respiratory Infection 3. Well-Child/Pediatric Visits in the Third, Fourth, Fifth and Sixth Years of Life 4. W34 - Well-Child Visits in the Third, Fourth, Fifth and Sixth Year 5. Immunizations for Adolescents Combo 1 6. Immunizations for Adolescents Combo 2 7. Weight Assessment and Counseling for Nutrition and Physical Activity for Children/ Adolescents