

## **PCP Bonus Methodology: Cost Effectiveness Calculation Overview**

To calculate the Cost Effectiveness bonus the following steps are taken:

### **1. Calculate Actual PMPM Costs of Enrollees Attributed to Provider Group**

These costs include all paid claims for each Alabama Coordinated Health Network (ACHN)-eligible attributed enrollees outside of claims paid for waiver services and claims for which the practice group could not be held accountable. The costs that are not reflected accurately in the MARA risk score are also removed. Costs are also exclusive of capitation payments and do not include hospital access payments.

$$\text{Provider Actual PMPM Costs} = \text{Group} \frac{\Sigma(\text{Enrollee Amount Paid})}{\Sigma(\text{Enrollee Months})}$$

### **2. Normalize Individual Risk Scores**

*\*\*this change was implemented in the October 2020 Scorecard*

The raw risk scores produced by the MARA software are relative to the broad healthcare experience that Milliman uses to build their model. Adding the normalization step calibrates each individual risk score to the ACHN.

Normalized Individual Risk Scores are calculated as follows:

$$A. \text{ Individual weight score (IWS)} = \text{Raw Risk Score} * \text{Months of Eligibility}$$

$$B. \text{ Total Risk Score} = \frac{\text{Sum(IWS)}}{\text{Sum(Months of Eligibility)}}$$

*This is one number for the entire ACHN population in a given quarter*

$$C. \text{ Normalized Individual Risk Score} = \frac{\text{Raw Risk Score}}{\text{Total Risk Score}}$$

### **3. Calculate Provider Risk Score**

$$\text{Practice Risk Score} = \frac{\Sigma(\text{Normalized Individual Risk Scores})}{\Sigma(\text{Enrollees})}$$

### **4. Calculate ACHN Statewide PMPM**

These are the same types of claims included and excluded as the individual Enrollee PMPM calculation.

$$\text{ACHN Statewide PMPM} = \text{Population} \frac{\Sigma(\text{ACHN Enrollee Amount Paid})}{\Sigma(\text{ACHN Enrollee Months})}$$

### **5. Calculate Provider Group's Expected PMPM**

$$\text{Group Expected PMPM} = \text{Provider Risk Score} \times \text{ACHN Statewide PMPM}$$

### **6. Calculate Provider Group's Cost Effectiveness Score**

$$\text{Group Cost Effectiveness Score} = \frac{\text{Group Actual PMPM (1)}}{\text{Group Expected PMPM(5)}}$$

## 7. Find Median of all ACHN Provider Group's Cost Effectiveness Scores

## 8. Distribute Bonus to ACHN Groups with Cost Effectiveness Score Equal to or Below Median

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### MARA Risk Scores

Every quarter, Medicaid uses risk adjustment software to calculate individual risk of each ACHN-eligible patient. The risk score is "a measurement of what an eligible patient's assessment period risk typically would be, based on their clinical profile." We use Milliman Advanced Risk Adjusters (MARA) software to generate eligible patient risk scores to calculate the Cost Effectiveness bonus. MARA risk scores are most often compared to CDPS risk scores, ACG risk scores, or HHS-HCC scores. MARA risk scores have been calculated on a monthly basis for Alabama Medicaid for 4+ years. We have been using them for case management and have continued to use them for provider profiling in the interest of continuity.

MARA software provides two risk scores for each pass through the software: a prospective risk score and concurrent risk score. As a reminder:

- **Concurrent Risk Scores** – provide a singular, standardized, expected risk score given the past year's claim experience and are used for Provider's Cost Effectiveness Calculations
- **Prospective Risk Scores** – predict *future* risk given the past year's claims experience and are used by an ACHN for Care Coordination

For Cost Effectiveness Calculations, a separate instance of risk scores are calculated on a quarterly basis. This calculation uses all claims data for a 12 month period offset by three months to allow time for claims runout. The claims are used to calculate the PMPM in the cost effectiveness calculation and the risk score. Only the concurrent risk score output is used for the cost effectiveness calculation.

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### FAQS

*My "Practice Risk Score" dropped significantly from the July to October Report. My practice operations and my other reports have not changed as significantly. I understand that the software version changed in October, so why did my practice risk score drop so much?*

The software version changed from MARA version 3 to MARA version 4 in October 2020. Version 4 brought slight decreases to average risk scores. Your practice risk score decreased significantly because we also normalized it to the ACHN population. Instead of the raw risk score, we first completed the three steps listed in item number 2 of the Cost Effectiveness Calculation Overview. This is so the numbers more accurately reflect the ACHN population and account for the patient's eligibility and access to care (by including exposure months). For instance, if your Practice Risk Score in July was 1.17, it means that your attributed group should cost 1.17 times that of all of Medicaid, even all of Alabama. Your practice risk score in October may have gone down to 0.69. This risk score means that your attributed group should cost 0.69 times that of the ACHN population. Since every provider group participating in ACHN had their risk score normalized to the ACHN

population, the same provider groups received the CE bonus that would have received a bonus if the calculation used raw risk scores. The change was made to more appropriately scale the cost effectiveness calculation.

*Does MARA take into consideration the patient profile that might not all be captured in a simple visit claim? Like people with chronic diseases, prematurity/ low birth weight, maternal substance abuse, obesity, etc. Could my practice risk score be affected by not including enough diagnosis codes in the claims we submit?*

The top 40 diagnosis codes on each claim for an individual are in the input file in MARA software. The software cannot know what it has not been told. MARA adds software patches on a regular basis for updated NDC and ICD codes. ICD codes for the social determinants of health issues should be used when applicable. MARA risk scores are used to evaluate what someone should cost given clinical and social issues. Issues like poor compliance and excessive ER services are more likely to poorly effect the Cost Effectiveness score. Please work with your ACHNs to identify if these patients are negatively affecting your score and work together to find ways to help these patients.

*Is there a limit (high) on the Individual Risk Score of a recipient?*

There is no limit on the individual risk score.

*If a risk score seems lower than anticipated what can practices do to raise that score?*

Concurrent risk scores cannot be raised. However, looking forward, scores could be impacted by optimizing appropriate coding, maximizing preventative care and utilizing ACHN care coordination resources.

*Doesn't this system incentivize my practice to NOT see patients in order to keep costs low?*

No. When individuals do not have any claims during the evaluation period their concurrent risk score is 0. (Please note: This may be different from previous guidance. However, MARA includes a baseline model for age and gender in the *prospective* risk score, *not the concurrent risk score for cost effectiveness calculations*). By seeing patients for their yearly visit and documenting their comorbidities, their individual risk scores will be higher than 0, thus accounting for the visit cost.

*What is the difference between a normalized risk score of 1 and cost effectiveness score of 1?*

A normalized risk score of 1 means that your patients match the average risk of the ACHN population. Alternately, a cost effectiveness score of 1 means that the actual PMPM of your attributed group is equal to the expected PMPM of your attributed group. Please note: Just because your actual PMPM matches your expected PMPM it does not mean that you qualify for the cost effectiveness bonus.

### **Costs and Cost Effectiveness Calculation**

*Why was the median chosen as the cutoff?*

The agency chose the median due to the susceptibility of averages being skewed by the outliers.

*How are outliers treated when calculating cost?*

The Agency has tried to remove cost outliers that are explainable from the onset. We realize there are certain claims within the Medicaid program that are not properly accounted for within the MARA system. We remove those claims when possible. The basis of our decision is *whether or not MARA accounts for high costs, not an outlier in total cost only*. We are continuing to evaluate these anomalies.

*Is the cost effectiveness of our Medicaid patients based on services that we do not provide (i.e., inpatient)? If so, why?*

In cost effectiveness calculations all claims of the patient are being considered. All claims, including hospitalizations, surgeries and ER visits contribute to a patient's total costs and acuity level. Providers are being evaluated this way in order to, hopefully, ensure that providers are engaging with patient care completely even if a specialist or hospital is needed. To focus on hospitals specifically, the goals of the ACHN program include providing care management and focusing on improved health outcomes. These goals cannot be considered, measured, or improved upon without considering hospitalizations. Since hospitalizations are being considered in risk score calculations, they should properly be accounted for on both sides of the equation by being considered in the cost calculations.

*If my PMPM is substantially lower than the state PMPM why do I still not receive a bonus?*

If the Cost Effectiveness score was above the median the practice does not receive the bonus payments.

### **Ways to Improve Your Score**

*Could my score have been affected by my office staff not including enough diagnosis codes to justify their risk?*

Yes. Each individual claim and the top 40 diagnosis codes go into the MARA software. The software can't know what it's not told. A few key areas are listed in the AAPC's article on risk adjustment documentation found here: <https://www.aapc.com/blog/35139-4-keys-areas-risk-adjustment-documentation/>.

*How can I improve my cost effectiveness score?*

1. Maximize Preventative Care
2. Optimize Appropriate Coding
3. Utilize ACHN Care Coordination Resources

Want some \*light\* reading?

1. AAPC's Article on Risk Adjustment Basics -- <https://www.aapc.com/blog/31687-understand-risk-adjustment-basics/>
2. Society of Actuaries' Article on Risk Scoring in Healthcare : A Primer -- <https://www.soa.org/globalassets/assets/Files/Research/research-2016-risk-scoring-health-insurance.pdf>
3. Society of Actuaries' Accuracy of Claims-Based Risk Scoring Models -- <https://www.soa.org/globalassets/assets/Files/Research/research-2016-accuracy-claims-based-risk-scoring-models.pdf>

## Adjustments made to CE methodology from January Bonus Payments to April Bonus Payments

1. Adjustments to Inputs in MARA Software
  - a. Increase in diagnosis codes
    - i. We previously utilized the top 7 diagnosis codes on each claim into the MARA software. We have since increased the number of diagnoses on each claim to 40. Most providers will be limited to 12 per our claims processing system. The new limit of 40 accommodates certain inpatient claims and preemptively allows for policy adjustments in the future.
  - b. Addition of crossover claims
    - i. We previously excluded these claims because of the financial relationship with Medicaid. However, in the interest of capturing a patient's acuity, we have added them back in.
  - c. Adjustment to inpatient claims
    - i. We refined our process for including all information associated with procedures and revenue regarding the stay.
2. Removal of Inpatient Psychiatry Claims
  - a. MARA risk scores do not properly account for people with Inpatient Psychiatry stays. Therefore, we are removing these claims from the statewide PMPM and each group provider's actual PMPM.

### Current Agency Considerations:

The agency is assessing different models to determine the maximum total amount that could be capped for Cost Effectiveness calculation purposes. Once finalized, the information will be shared with the providers.

### *How do the changes to the MARA input file impact the final risk scores?*

a. The average difference in risk scores with 7 diagnoses and 40 diagnoses was 0.07. This comparison uses very similar input datasets with the same claims dates. We attempted to only add diagnoses 8-40 to test the differences. The average risk score with 7 diagnoses was 1.29 and the average risk score with 40 diagnoses was 1.36. *\*\*\* Of note: We performed a Wilcoxon Signed Rank Test<sup>1</sup> which showed a significant difference in the risk scores with a p value of <0.001. However, with such a large sample size there is little doubt the change would have been considered significant.*

b. Risk scores for people with mostly crossover claims have significantly increased. When no crossover claims were included the average risk score for dual enrollees was 0.119. When crossover claims were included (even though Medicaid may not have paid for them), the average risk score increased to 1.337. This addition ensures that months where a Medicaid eligible person was also enrolled in Medicare are properly accounted for within the Cost Effectiveness methodology.

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<sup>1</sup> <http://www.biostathandbook.com/wilcoxsignedrank.html>