

# UnitedHealth Premium

## Effective quality care evaluation example



Additional UnitedHealth Premium® methodology documents are located on [unitedhealthpremium.uhc.com](https://unitedhealthpremium.uhc.com).

### Overview

Premium uses a 5-step process to evaluate the physician's effective quality care performance.



We've provided an example for a fictional Dr. Smith to help you understand how each step in the process works.

#### Step 1: Count measures and patients

Count the total number of measures attributed to the physician. A minimum of 20 measures among at least 5 patients across all patient populations, conditions and procedures is required.

**In this example, Dr. Smith is attributed 30 measures for diabetes, 20 measures for atrial fibrillation and 5 measures for breast cancer screening, for a total of 55 measures.**

#### Step 2: Determine performance

Sum the attributed measures where the patient meets the measure criteria.

**In this example, the number of compliant measures is 23, 20 and 3, resulting in Dr. Smith's performance of 46.**

### Step 3: Establish minimum score benchmark

Calculate the number of measures expected to be compliant at the 50th percentile by multiplying the number of each measure attributed to the physician by the national compliance rate.

**In this example, the national compliance rates for the measures attributed to Dr. Smith are 70%, 70% and 80%. Therefore, the target benchmark is  $((.70 * 30) + (.70 * 20) + (.80 * 5)) = 39$ .**

Measure	Attributed measures	Dr. Smith's performance		National compliance rate	Minimum score benchmark	
		Compliant	Non-compliant		Compliant	Non-compliant
<b>Diabetes:</b> Patient(s) ages 18–75 who had a HbA1c test in last 12 reported months	30	23	7	70.0%	21	9
<b>Atrial fibrillation:</b> Patient(s) at high risk for thromboembolism who are currently taking warfarin, an oral thrombin inhibitor, or an oral factor Xa inhibitor	20	20	0	70.0%	14	6
<b>Breast cancer screening:</b> Patient(s) ages 52–74 years who had a screening mammogram in last 27 reported months	5	3	2	80.0%	4	1
<b>Total</b>	55	46	9		39	16
<b>Compliance rate</b>		83.64%			70.91%	

### Step 4: Calculate score

Physicians whose performance is not statistically different from the minimum score benchmark receive an effective quality care score of 50. Physicians whose performance is statistically different from the minimum score benchmark receive the score corresponding to the highest or lowest percentile at which the physician's performance is statistically higher or lower than the adjusted number of measures expected to be compliant at that level.

**A** Calculate the standard deviation (SD).

**Formula** =  $\sqrt{[\text{number of measures attributed to the physician} * (\text{minimum score benchmark rate}) * (1 - \text{minimum score benchmark rate})]}$ .

**In this example,**  $\sqrt{[55 \text{ from step 1 above} * (.7091 \text{ from step 3 above}) * (1 - .7091 \text{ from step 3 above})]}$  = 3.3683.

- B** Calculate the adjusted number of measures expected to be compliant for each percentile from 5 to 95 (from column I below) by adding the applicable proportion of a SD to the number of measures expected to be compliant at the 50th percentile.

**Formula** = number of measures expected to be compliant at 50th percentile + (proportional SD coefficient \* SD).

**In this example, 39 from step 3 above + (coefficient from column II below \* 3.3683 from step 4A above) = column III below.**

- C** Determine if performance is statistically different from the adjusted number of measures expected to be compliant with 90% confidence by calculating the chi-square result and the phi-coefficient.

**Formula:** chi-square = ((physician[compliant] - adjusted[compliant])<sup>2</sup>/adjusted[compliant]) + ((physician[non-compliant] - adjusted[non-compliant])<sup>2</sup>/adjusted[non-compliant]).

**In this example, ((46 from step 2 above - value from column III below)<sup>2</sup>/value from column III below) + ((9 from step 3 above - value from column IV below)<sup>2</sup>/value from column IV below) = column V below.**

**Formula:** phi-coefficient =  $\sqrt{\text{chi-square result} / \text{total number of measures attributed to the physician}}$ .

**In this example,  $\sqrt{\text{value from column V below} / 55 \text{ from step 1 above}} = \text{column VI below}.$**

Performance is statistically different from the adjusted number of measures expected to be compliant when the chi-square result is greater than 2.7055 and the phi-coefficient is greater than 0.112.

In this example, the highest percentile at which Dr. Smith's performance is statistically higher than the adjusted number of measures expected to be compliant is 65. Therefore, Dr. Smith's effective quality care score (from column VII below) = 70.

I	II	III	IV	V	VI	VII
Percentile level	Proportional SD coefficient	Adjusted compliant	Adjusted non-compliant	Chi-square result	Phi-coefficient	Effective quality care score
95	1.6449	44.54	10.46	0.2515	0.0676	100
90	1.2816	43.32	11.68	0.7824	0.1193	95
85	1.0364	42.49	12.51	1.2742	0.1522	90
80	0.8416	41.83	13.17	1.7325	0.1775	85
75	0.6745	41.27	13.73	2.1700	0.1986	80
70	0.5244	40.77	14.23	2.5963	0.2173	75
<b>65</b>	<b>0.3853</b>	<b>40.30</b>	<b>14.70</b>	<b>3.0184</b>	<b>0.2343</b>	<b>70</b>
60	0.2533	39.85	15.15	3.4425	0.2502	65
55	0.1257	39.42	15.58	3.8738	0.2654	60
50	0.0000	39.00	16.00	4.3189	0.2802	45 or 50 or 55 <sup>1</sup>
45	-0.1257	38.58	16.42	4.7839	0.2949	40
40	-0.2533	38.15	16.85	5.2761	0.3097	35
35	-0.3853	37.70	17.30	5.8067	0.3249	30
30	-0.5244	37.23	17.77	6.3894	0.3408	25
25	-0.6745	36.73	18.27	7.0456	0.3579	20
20	-0.8416	36.17	18.83	7.8098	0.3768	15
15	-1.0364	35.51	19.49	8.7762	0.3988	10
10	-1.2816	34.68	20.32	9.9962	0.4263	5
5	-1.6449	33.46	21.54	12.0010	0.4671	0

<sup>1</sup>If performance is not statistically different from the 50th percentile, the score is 50. If 50th percentile is the highest level at which the performance is statistically higher, the score is 55. If 50th percentile is the lowest level at which performance is statistically lower, the score is 45.

## Step 5: Determine evaluation result

The physician meets the effective quality care criteria when the score is 50 or higher.

**In this example, Dr. Smith's score is 70. Therefore, Dr. Smith's evaluation result is "Meets Criteria."**

## Important notes about UnitedHealth Premium

The information from UnitedHealth Premium is not an endorsement of a particular physician or health care professional's suitability for the health care needs of any member. UnitedHealthcare does not practice medicine nor provide health care services. Physicians are solely responsible for medical judgments and treatments.

A Premium Care Physician designation does not guarantee the quality or the outcome of any health care services members receive. The fact that a physician does not have a Premium Care Physician designation does not mean the physician does not provide quality health care services.

All physicians in the UnitedHealthcare Network have met certain minimum credentialing requirements. Regardless of whether a physician has received a Premium Care Physician designation, members have access to all physicians in the UnitedHealthcare Network as described in the member's benefit plan.

There are various reasons why a physician may not be designated as a Premium Care Physician. A physician may not receive a designation because that physician has not been evaluated. This occurs when a physician does not practice in a specialty or market that is evaluated by Premium, or the physician's evaluation is in process. This also occurs when there are not enough measures, patients, and or episodes attributed to the physician for evaluation. This is not an indicator of the total number of patients treated by the physician, or the number of procedures performed by the physician.

**UnitedHealthcare informs members that designations are intended only as a guide when choosing a physician and should not be the sole factor in selecting a physician. Members are encouraged to discuss designations with a physician before choosing them or consult with their current physician(s) for advice on selecting other physicians.**

**As with all programs that evaluate performance based on evaluation of a sample, there is a risk of error.**

There is a risk of error in the claims data used and in the way patient care is attributed to physicians. UnitedHealth Premium uses statistical testing to compare a physician's performance to benchmarks. There is a risk of error in statistical tests when applied to the data and a result based on statistical testing is not a guarantee of correct inference or classification. Physicians have the opportunity to review the data and evaluation results and may submit requests for changes and or corrections.

**The information contained in this document is subject to change.**

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