

# Star Ratings Calculation Methodology

## Overview

This document explains how Press Ganey calculates star ratings for display on provider directories. The intent is to use a simple calculation which allows end consumers to visualize provider performance in the form of star ratings. In general, the star rating is simply the mean score divided by 20, to get a star rating on a 0-5 scale. CAHPS questions follow the same logic, but are slightly more complex due to the different survey response scales.

Due to the small range of possible values (i.e. 0-5), Press Ganey does not recommend using star ratings as an internal measure for provider performance.

## Response Scale Conversion

### Press Ganey Questions

All Press Ganey questions have 5 response categories and receive scores on a 0-100 scale as shown below:

	<b>Very Poor</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Very Good</b>
<b>Score =</b>	<b>0</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>

### CG CAHPS Questions

CG CAHPS questions have several response scales. For the purpose of calculating star ratings, Press Ganey uses the following conversions in order to calculate scores on a 0-100 scale:

	<b>No*</b>	<b>Yes*</b>
<b>Score =</b>	<b>0</b>	<b>100</b>

\*The conversion of yes/no items depends on which response is the most favorable option.

	<b>No</b>	<b>Yes, Somewhat</b>	<b>Yes, Definitely</b>
<b>Score =</b>	<b>0</b>	<b>50</b>	<b>100</b>

	<b>Never</b>	<b>Sometimes</b>	<b>Usually</b>	<b>Always</b>
<b>Score =</b>	<b>0</b>	<b>33.33</b>	<b>66.66</b>	<b>100</b>

	<b>0-Worst Provider</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10-best provider</b>
<b>Score =</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>

## Provider Star Ratings

Provider star ratings on the 0-5 scale are calculated by dividing the provider's question mean scores by 20. The provider's question mean scores are the average of patient responses to individual questions. Summary star ratings are an average of a provider's question level star ratings.

To illustrate this calculation, consider the example below:

<b>PROVIDER: Doe, MD</b>	Patient A	Patient B	Patient C	Patient D	Patient E	<b>Provider Mean Score</b>	<b>Provider Star Rating (Mean score ÷ 20)</b>
Question 1	50	75	100	100	75	<b>80</b>	<b>4.00</b>
Question 2	50	0	25	100	100	<b>55</b>	<b>2.75</b>
Question 3	75	75	75	100	75	<b>80</b>	<b>4.00</b>
Summary Rating							<b>3.58</b>

$$\text{Provider Mean Score for Question 1} = \frac{50 + 75 + 100 + 100 + 75}{5} = 80$$

$$\text{Provider Star Rating for Question 1} = \frac{80}{20} = 4 \text{ Stars}$$

$$\text{Provider Summary Star Rating} = \frac{4 + 2.75 + 4}{3} = 3.58 \text{ Stars}$$

## Patient Star Ratings

Patient star ratings are calculated by dividing the patient's aggregate mean score by 20. For clients using only one question in the patient star rating, the star rating would simply be the individual question score, divided by 20. Please note that Press Ganey offers patient star ratings as an option, but strongly encourages organizations to focus Transparency efforts on the *provider* star ratings.

To illustrate this calculation, consider the example below:

<b>PROVIDER: Doe, MD</b>	Patient A	Patient B	Patient C	Patient D	Patient E
Question 1	50	75	100	100	75
Question 2	50	0	25	100	100
Question 3	75	75	75	100	75
<b>Patient Aggregate Mean Score</b>	<b>58.33</b>	<b>50.00</b>	<b>66.67</b>	<b>100.00</b>	<b>83.33</b>
<b>Patient Star Rating (Mean score ÷ 20)</b>	<b>2.92</b>	<b>2.50</b>	<b>3.33</b>	<b>5.00</b>	<b>4.17</b>

$$\text{Patient A Aggregate Mean Score} = \frac{50 + 50 + 75}{3} = 58.33$$

$$\text{Patient A Star Rating} = \frac{58.33}{20} = 2.92 \text{ Stars}$$